DRAFT
ENVIRONMENTAL IMPACT REPORT

FMC/COLEMAN AVENUE

PLANNED DEVELOPMENT REZONING

(PDC98-104)

EIR Text and Technical Appendices

City of San Jose

SCH#1999122059

April 2003

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Planning, Building and Code Enforcement
STEPHEN M. HAASE, AICP, DIRECTOR

April 8, 2003

Ladies and Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE FMC Planned Development Rezoning (PDC98-104)(SCH No. 1999122059)

The Planning Commission of the City of San Jose will hold a Public Hearing to consider the Draft Environmental Impact Report (DEIR) prepared for the project described below. A copy of the DEIR is attached for your review.

Your comments regarding the significant environmental effects of this project and the adequacy of the DEIR are welcome. Written comments, submitted to the Department of Planning, Building and Code Enforcement by 5:00 p.m., Thursday, May 15, 2003, will be included in the EIR and be considered by the Planning Commission at this public hearing. *If you make comments through a state or regional clearinghouse, please send a copy of your comments to the contact person listed below to insure prompt consideration.* If we do not receive comments (or a request for an extension of time) from you by the specified date, we will assume you have none to make.

Project Description and Location: Draft Environmental Impact Report for the FMC Planned Development Rezoning (PDC98-104) from HI Heavy Industrial Zoning District to A(PD) Planned Development Zoning District to allow the redevelopment of an approximately 92.5-acre site bounded by Coleman Avenue to the northeast, Newhall Street to the southeast, Southern Pacific Railroad lines to the southwest, and the jurisdictional boundary of the City of Santa Clara to the northwest. The proposed rezoning of the site would allow construction of up to three million square feet of new office/R&D development. In addition, an undetermined amount of hotel, retail, and commercial uses may be constructed, but in no case would total development of the site exceed the traffic performance criteria that are equivalent to the traffic that would result from three million square feet of new office/R&D development. Existing building demolition, parking, landscaping, public and private streets, and necessary new infrastructure are also included in the project (SCH No. 1999122059).

Tentative Hearing Date: July 9, 2003 Council District: 3

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Sincerely,

Ron Eddow

Ron Eddow, Senior Planner

PDC98-12-104 DEIR Cover Ltr.doc/JAM

PREFACE

This document has been prepared by the City of San Jose as the Lead Agency in conformance with the California Environmental Quality Act (CEQA). The City of San Jose has determined that an Environmental Impact Report (EIR) is required for the redevelopment of the FMC property on Coleman Avenue in North San Jose. This EIR provides environmental review to assist the public agency decision-makers in considering the approval or denial of the proposed project.

In conformance with the CEQA Guidelines, the EIR provides objective information regarding the environmental consequences of the proposed project, and identifies possible means for mitigating impacts. The EIR also examines various alternatives to the project to reduce or eliminate significant environmental impacts. The following guidelines are included in CEQA to clarify the role of an EIR:

> **§15121(a). Informational Document.** An EIR is an informational document which will inform public agency decision-makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.
>
> **§15146. Degree of Specificity.** The degree of specificity required in an EIR corresponds to the degree of specificity involved in the underlying activity which is described in the EIR.
>
> **§15151. Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently considers environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

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SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project applicant proposes a rezoning of the approximately 92.5-acre FMC site from *HI: Heavy Industrial* to *A(PD) Planned Development* to allow the redevelopment of the site, which is located adjacent to Norman Y. Mineta San Jose International Airport. The proposed rezoning would allow redevelopment of the site with construction of up to three million square feet of new office/R&D development. In addition, an undetermined amount of hotel, retail, and commercial uses may be constructed, but in no case would total development of the site exceed the traffic performance criteria that are equivalent to the traffic that would result from three million square feet of new office/R&D development. Parking, landscaping, public and private streets, and necessary new infrastructure are also included in the project. The proposed redevelopment includes the demolition of the existing testing and manufacturing facilities currently located on the project site.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATIONS

The following summarizes the primary impacts of the project. The reader is referred to the main body of the DEIR for discussions of the environmental setting, impacts, and mitigation measures.

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Land Use	
The proposed project uses are generally compatible with the existing surrounding land uses. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
As currently proposed, no structures are proposed within the ALUC safety zone that crosses a portion of the southeast corner of the site. Building heights proposed for the site are not expected to exceed the height limit requirements of NYMSJIA, as established by the FAA. All building heights proposed for the site will comply with the limits defined by FAA standards for the NYMSJIA and the City's existing avigation easement for the property. Any proposed structures which would exceed these established limits would be subject to FAA review and issuance of a Determination of No Hazard and agreement from the City to amend its avigation easement. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Land Use (Continued)	
The project would allow a mixture of office/R&D or commercial uses that would be more likely to be compatible with the existing uses to the south when compared to the currently allowed heavy industrial uses. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
The proposed project would not substantially change the visual character of the area from what currently exists. Building heights will be limited to those allowed in the General Plan and by FAA requirements. The project would not result in significant light and glare or shading impacts. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Redevelopment of the site would not result in a significant loss of open space. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Transportation	
Development of the proposed project would cause significant impacts, under project conditions, to three local City of San Jose intersections. **(Significant Impact)**	Mitigation measures are included in the project at each of the three intersections, as described in Section III. B., of the EIR. Measures include the reconfiguration of the intersections and signal modifications. **(Less than Significant Impact with Mitigation)**
Development of the proposed project would not worsen conditions at the Central Expressway/De La Cruz Blvd. CMP intersection. **(Less than Significant Impact)**	Modifications to this intersection are currently being designed by Santa Clara County and implementation is funded by both the County and the City of San Jose. **(Less than Significant Impact)**
The proposed project would add greater than one percent capacity to 16 freeway segments already operating at LOS F. **(Significant Impact)**	Mitigation for freeway impacts would require adding lanes to the freeways. This is not practical for one development to implement. Therefore, the project would include measures to encourage the use of public transit and carpooling, as described in Section III., B., 3. of this EIR. In addition, a Transportation Demand Management program will be implemented. However, implementation of these measures would not reduce impacts to freeway segments to a less than significant level. **(Significant Unavoidable Impact)**

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Transportation (Continued)	
The construction of a future BART station adjacent to the project site, as well as improving public sidewalks in the project area, would avoid or reduce transit impacts of the project to a less than significant level. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
The project would have adequate site circulation and access for both safe and convenient vehicular ingress and egress and interior site circulation. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
The project would have no impact on bicycle plans and may impact pedestrian facilities favorably. **(No Impact)**	**(No Impact)**
The proposed project would provide adequate parking of 9,600 spaces, would provide parking for handicapped drivers, and would include a range of measures aimed at reducing single-occupant vehicle use. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
Air Quality	
Development of the project would not result in significant impacts associated with the generation of carbon monoxide. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
Development of the proposed project would result in a significant impact on regional air quality due to increased emissions associated with project traffic. **(Significant Impact)**	The project will implement a Transportation Demand Management (TDM) program to encourage the use of public transportation and carpooling by employees. Site planning will provide effective and safe pedestrian/bicycle circulation and development will be oriented toward transit opportunities. The adopting of these measures would reduce regional air quality impacts; however, they would not be sufficient to reduce the impact to a less than significant level. **(Significant Unavoidable Impact)**

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Air Quality (Continued)	
Construction of the proposed project would result in significant short-term air quality impacts to construction workers and residents downwind of the site. **(Significant Impact)**	Implementation of the following mitigation measures will avoid or reduce construction-related air quality impacts to a less than significant level: ▪ Preparation and implementation of an Integrated Environmental Safety and Health Plan to monitor hazardous materials emissions during construction; ▪ Conformance with the City's Grading Ordinance; ▪ Acquisition of a permit from the BAAQMD for the use of a concrete crusher on site; ▪ BMPs to ensure that dust is kept to a minimum on the site, including watering active construction areas, covering all stockpiles and trucks, damp sweeping adjacent streets, limiting traffic speeds, using erosion control measures to prevent runoff, and replanting vegetation as quickly as possible. **(Less than Significant Impact with Mitigation)**
Noise	

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
In some locations, noise levels on the project site are currently projected to be above City standards for the proposed uses. Some occupants of future individual R&D/office buildings may be exposed to interior noise levels above 45 dBA. Hotel uses or sensitive commercial uses may experience noise levels that exceed ALUC and General Plan noise standards. **(Significant Impact)**	Implementation of the following mitigation measures will avoid or reduce noise impacts to a less than significant level: ▪ An acoustical consultant shall review final project plans and provide recommendations to ensure that interior noise levels of 45 dBA are maintained for future occupants of the site. Recommendations may include, but are not limited to: • Maintenance of a minimum setback distance from all noise sources; • Use of high noise-rated windows, forced ventilation, and insulation in building construction; and
In some locations, noise levels on the project site are currently projected to be above City standards for the proposed uses. Some occupants of future individual R&D/office buildings may be exposed to interior noise levels above 45 dBA. Hotel uses or sensitive commercial uses may experience noise levels that exceed ALUC and General Plan noise standards. **(Significant Impact)**	**Noise (Continued)** • Restriction of outdoor activities to areas on the site protected from environmental noise sources. **(Less than Significant Impact with Mitigation)**
Future redevelopment of the project site is not expected to result in significant traffic-related noise. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
Construction activities and demolition would not result in significant construction-related noise impacts to the adjacent residential neighborhood located south of the project site. **(Less than Significant Impact)**	

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
	and sensitive land uses within 300 feet of the project site; • Time particularly noisy operations to minimize conflicts with nearby sensitive land uses; • Unless, otherwise expressly allowed in a development permit or other planning approval, construction operations within 500 feet of residential units will be limited to 7:00 a.m. to 7:00 p.m., weekdays; • Use of available noise suppression devices on construction equipment; and • Avoid staging of construction equipment or idling within 200 feet of sensitive noise receptors. **(Less than Significant Impact with Mitigation)**
	Geology
Future development on the site including buildings and infrastructure would be exposed to seismic hazards, including the potential for groundshaking, liquefaction, expansive soils, and vertical movement in the event of an earthquake. **(Significant Impact)**	Implementation of the following mitigation measures will avoid or reduce potential soils, geological, and seismic hazards to a less than significant level: • Geotechnical investigation will be completed prior to the approval of building permits. Buildings will be designed to conform to the recommendations of the geotechnical investigation. • Seismic hazards will be mitigated by using construction practices in accordance with Seismic Zone 4 building Criteria as described in the San Jose Building Code. **(Less than Significant Impact with Mitigation)**

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Hydrology	
Redevelopment of the site would potentially reduce stormwater runoff when compared to the existing conditions on the site. The proposed project would not result in the exposure of future occupants to significant flooding risks. **(Less than Significant Impact)**	Mitigation measures for stormwater quality would further reduce the amount of stormwater generated at the project site. No additional mitigation measures are required or proposed. **(Less than Significant Impact)**
Construction activities, including grading and demolition, could result in adverse impacts to water quality during rain events. **(Significant Impact)**	The project will obtain and conform to the requirements of the General NPDES Construction Activity Stormwater permit administered by the Regional Water Quality Control Board and the City of San Jose. As such, as Stormwater Pollution Prevention Plan will be prepared to include the following measures: • Eliminate or reduce non-stormwater discharges to the storm sewer system; • Perform regular monitoring of discharges to the stormwater system;
Hydrology (Continued)	
	• Implement BMPs such as restricting grading to the dry season or using BMPs for wet season erosion control, using damp street sweeping; and providing permanent cover to stabilize disturbed surfaces. **(Less than Significant Impact with Mitigation)**
Stormwater runoff from ongoing operations of the future development could contribute to a degradation of surface water quality. **(Significant Impact)**	The project will comply with Provision C.3 of the City's NPDES Permit. Grass/vegetated swales will be employed on the site for stormwater quality control, to reduce or avoid long-term impacts to water quality. These swales will be constructed as described in Section III., F. of this EIR. In addition, the project shall implement additional BMPs including:

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
	• Regular maintenance activities will be conducted to prevent soil, grease, and litter from accumulating on the site and contaminating surface runoff; • Trash and recycling storage areas will be covered; and • Stormwater catch basins will be stenciled to discourage illegal dumping. **(Less than Significant Impact with Mitigation)**
Vegetation and Wildlife	
Redevelopment of the project site would not result in significant impacts to developed or ruderal habitats. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Construction activities associated with the proposed project could result in the loss of Burrowing Owls, their young, and/or fertile eggs. **(Significant Impact)**	The following measures are included as part of the project to avoid or reduce potential impacts to individual Burrowing Owls during construction: A preconstruction survey will be conducted in conformance with appropriate federal and state regulations, no more than 30 days prior to the start of construction. If no owls are located, then no additional
Vegetation and Wildlife (Continued)	
	• action would be warranted. If owls are located on, or adjacent to the site, the following measures will be implemented by a qualified ornithologist: o No owls will be evicted from burrows during the nesting season (February 1 through August 31); o A 250-foot buffer, within which no new activity will be permissible, will be maintained and will remain in effect until August 31 or at the discretion of the CDFG and based upon monitoring evidence, until the young owls

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
	are foraging independently; and o If accidental take of owls occurs, the CDFG will be notified immediately. **(Less than Significant Impact with Mitigation)**
Redevelopment of the project site will result in the loss of approximately seven acres of Burrowing Owl nesting and foraging habitat. The loss of Burrowing Owl habitat that is known to have been occupied by owls during the nesting season within the past three years is considered a significant impact. **(Significant Impact)**	Two possible mitigation measures were identified for the loss of Burrowing Owl habitat; however, implementation of these measures would not reduce the impact of the loss of local habitat to a less than significant level. One mitigation measure (providing replacement habitat on the project site to be protected in perpetuity) was identified that would reduce the impact to a less than significant level. This measure is not included as part of the project. **(Significant Unmitigated Impact)**
The project includes the removal of up to 127 ordinance size trees which constitutes a significant impact. **(Significant Impact)**	The proposed project will include the incorporation of as many existing trees as possible into the landscape plan. Trees to be retained will be protected during construction. If the trees cannot be preserved in their present locations, transplanting the trees to other locations on the site will be explored. For trees that cannot be incorporated or

Vegetation and Wildlife (Continued)

	transplanted, tree removal permits will be obtained. The loss of trees will be mitigated in conformance with City of San Jose guidelines and specifications. **(Less than Significant Impact with Mitigation)**

Hazardous Materials

Construction activities associated with redeveloping the project site, such as demolition, excavation, and grading could expose construction workers, and/or the public to health risks associated with contaminated groundwater and soil. **(Significant Impact)**	At the time development is proposed, an Integrated Environmental Safety and Health Plan will be prepared. The IESHP will provide: • a means for monitoring hazardous materials in soils and buildings to be demolished; • the assessment of risks associated with

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
	each potential hazard; • the development of measures to minimize risk to workers and the public by controlling airborne emissions; • a means of coordinating with regulatory agencies; • a means of controlling emission of ordinary particulate matter or dust that would not be classified as "hazardous". **(Less than Significant Impact with Mitigation)**
The proposed project would result in demolition of the existing buildings and facilities on the project site. Demolition activities could expose construction workers and/or the public to contaminants, including lead paint and asbestos if those materials become airborne. **(Significant Impact)**	All demolition activities of the proposed project will be undertaken according to OSHA and EPA standards to protect workers and offsite receptors from exposure to asbestos and/or lead paint. **(Less than Significant Impact with Mitigation)**
Redevelopment of the site could expose construction workers and/or the public to hazardous materials during and/or following demolition/construction activities associated with the removal and/or transport of hazardous materials. **(Significant Impact)**	Implementation of the following mitigation measures will avoid or reduce impacts to a less than significant level: • All demolition activities of the proposed project will be undertaken according to OSHA and EPA

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Hazardous Materials (Continued)	
	standards to protect workers and offsite receptors from exposure to asbestos and/or lead paint. • Building materials classified as hazardous will be transported and disposed of in conformance with all federal, state, and local regulations. • Hazardous materials cleanup and remediation will be required to meet all federal, state, and local regulations. **(Less than Significant Impact with Mitigation)**
Contaminated soils have been removed from the site; however, there is still a potential for future users to be exposed to hazardous materials. Deed restrictions will be in place for the site to ensure that soils is covered with buildings and/or pavement, groundwater is not drawn on the site for use, and that property is developed only with non-residential uses. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
The proposed project would not result in an overall increase in the likelihood of incidents associated with the future use and storage of hazardous materials. **(Less than Significant Impact)**	No mitigation measures are required or proposed. **(Less than Significant Impact)**
Cultural Resources	
Although no indicators of archaeological resources are present on the site, the general project area is considered to be moderately to highly sensitive for buried cultural resources. **(Significant Impact)**	Implementation of archaeological monitoring program by a professional archaeologist will be undertaken for the project site to avoid or reduce impacts to a less than significant level. If any significant cultural materials are discovered, construction operations will stop within 10 feet of the find and recommendations will be made by the archaeologist as to the appropriate course of action. **(Less than Significant Impact with Mitigation)**
The proposed project would not result in the loss of historic structures. **(No Impact)**	**(No Impact)**

ENVIRONMENTAL IMPACTS	MITIGATION MEASURES
Utilities and Service Systems	
There is sufficient capacity in existing service systems to serve the proposed project, including wastewater treatment, water, and solid waste services. The project may be required to extend sanitary sewer mains onto the project site. The extension of these facilities would not result in significant environmental impacts. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Energy	
The proposed project will be designed and constructed according to all state and local building codes and regulations aimed at reducing energy consumption. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Availability of Public Services	
Redevelopment of the property would generate incremental increases in the demand for fire and police protection services. However, no new fire stations or police facilities would be required as a result of the proposed project. **(Less than Significant Impact)**	No mitigation is required or proposed. **(Less than Significant Impact)**
Cumulative Impacts	
The proposed project would result in significant cumulative traffic, air quality, and loss of Burrowing Owl habitat impacts. **(Significant Cumulative Impact)**	Since there is are no mechanisms in place to achieve mitigation of identified cumulative impacts, this would be a significant unavoidable cumulative impact. **(Significant Unavoidable Cumulative Impact)**

SUMMARY OF ALTERNATIVES

CEQA requires that an EIR identify alternatives to a project, as proposed. The CEQA Guidelines specify that the EIR identify alternatives which would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen many of the significant environmental effects of the project". In addition, the "No Project" alternative must be discussed. The significant unavoidable impacts of the project are traffic impacts to regional facilities, regional air quality impacts, and impacts associated with the loss of local burrowing owl habitat.

A. NO PROJECT ALTERNATIVE

The No Project Alternative could consist of retaining the existing Heavy Industrial zoning on the site and either reusing the existing buildings or redeveloping the site with Heavy Industrial uses.

1. **No Development Scenario:** Under this scenario, the property would physically remain as it is and no new construction or expansion of facilities would occur.

   This alternative would be environmentally superior to the proposed project since it would not result in the loss of trees or the loss of Burrowing Owls or their habitat. Traffic impacts would be less than with the proposed project since the uses would not employ as many workers as the proposed project. Impacts associated with previous and future hazardous materials on the site would be similar to those of the proposed project. Depending on the type of heavy industrial uses that would occupy the site, air quality impacts could be greater than with the proposed project.

   The No Development Alternative would not meet the project objectives in that it would not enhance the economic viability of the project area by providing a substantial increase in the number of jobs. In addition, substantial upgrades to the existing buildings would be required prior to occupation, which may not be economically feasible. For these reasons, the No Development Alternative is not considered a feasible alternative to the project.

2. **Development under the Existing Zoning Designation:** This alternative would leave the site with its current zoning designation of *Heavy Industrial*, which is not consistent with the General Plan designation for the site. Heavy Industrial uses allow industrial uses with nuisance or hazardous characteristics which are best segregated from other uses. Such uses could potentially result in greater noise and hazardous materials impacts. Traffic and resulting air quality impacts would be slightly reduced given the site would not be developed as densely as the proposed project.

   Impacts to vegetation and wildlife would be similar to those expected with the proposed project. Demolition and construction impacts would also be similar. While some impacts may be reduced, this alternative would not meet the project objective of providing a dense employment center in north San Jose, near a Caltrain station and the NYMSJIA. In addition, this alternative would not result in the development of off-site airport compatible uses. For these reasons, the Development under the Existing Zoning Alternative is not considered a feasible alternative to the project.

B. Regional Commercial Alternative: Under this alternative, the entire site would be developed with a regional shopping mall, a group of specialty stores, or an outlet mall. While this type of use would generate more overall traffic trips, these trips would not be concentrated during the AM or PM peak hours. Therefore, it is difficult to compare traffic conditions with those of the proposed project. While traffic impacts may be less during the week, they would be greater on the weekends, and since trips would be generated regionally, this alternative may have greater impacts to intersections and freeway segments in other jurisdictions.

Air quality impacts would be less since traffic impacts would potentially be reduced. Impacts to Burrowing Owls and their habitat and ordinance size trees would be similar to those with the proposed project. Noise and construction-related impacts would be similar, including hazardous materials impacts during demolition of the existing buildings on the site.

Given the abundance of regional shopping opportunities in the City and in proximity to this site, this alternative would not offer an economically feasible location to support additional regional retail uses. This alternative would not be consistent with the General Plan policies that encourage new regional scale development to locate in the Downtown Core Area. For these reasons, the Development under the Existing Zoning Alternative is not considered a feasible alternative to the project.

C. Reduced Scale Alternative: The reduced scale alternative consists of clearing the site of existing structures and redeveloping the property with office, R&D, and commercial uses totaling approximately 1.8 million square feet. This alternative would result in fewer traffic, noise, and air quality impacts. Under this alternative, depending upon how the site was used, Burrowing Owl habitat could be preserved and impacts to owls could be reduced or avoided. More ordinance size trees could be retained on the site when compared to the proposed project.

This alternative is environmentally superior to the proposed project since impacts would be reduced. To the extent that this alternative provides some economic benefits, it meets some of the project objectives. However, the redevelopment and infrastructure costs of this alternative would be too great to make this alternative economically feasible. This alternative includes fewer jobs; therefore, it would not have the same beneficial effects on San Jose's jobs/housing balance as the proposed project. For these reasons, the Reduced Scale Alternative is not considered a feasible alternative to the project.

D. Alternative Location: Examination of this possible alternative found that there is no other 92.5 acres site located within the City that has a General Plan designation of *Combined Industrial/Commercial*. The North Coyote Valley area was the only area identified that was of sufficient size to be considered a possible alternative location; however, the site has General Plan and Zoning designations for *Campus Industrial* uses.

Under this alternative, traffic and air quality impacts would be less since the Coyote Valley area (southernmost San Jose) is not as congested and its development would encourage a "reverse commute" condition, as most jobs in San Jose are located in the north. Regional air quality impacts would be similar to the proposed project. While this alternative would not be expected to impact Burrowing Owls since there are no known populations of owls in Coyote Valley, it may impact other special status plant and animal species. It is unknown whether this alternative would result in the loss of a greater number of ordinance size trees.

This alternative would result in the loss of quality open space, agricultural lands, and wetlands when compared to the proposed project. In addition, there would be a greater potential for visual and flooding impacts. This alternative is not environmentally superior to the proposed project and does not meet the objectives of the project to revitalize an under-utilized site at an infill location that is conveniently located near downtown San Jose and NYMSJIA. For these reasons, the Alternative Location is not considered a feasible alternative to the project.

I. DESCRIPTION OF THE PROJECT

A. OVERVIEW OF THE PROJECT

The proposed project is the rezoning of the approximately 92.5-acre FMC Corporation/Arcadia Development site ("FMC Site") west of Norman Y. Mineta San Jose International Airport in north San Jose. The project includes a Planned Development Rezoning to allow the redevelopment of 92.5 acres of the FMC site on Coleman Avenue. The proposed rezoning would allow the construction of up to three million square feet of new office/R&D development. In addition, an undetermined amount of hotel, retail, and commercial uses may be constructed, but in no case would total development of the site exceed the traffic performance criteria that are equivalent to the traffic that would result from three million square feet of new office/R&D development. New development also includes parking, landscaping, public streets, internal private streets, and necessary new infrastructure. The existing testing and manufacturing facilities would be demolished and removed.

B. PROJECT LOCATION

The project site is located west of the Norman Y. Mineta San Jose International Airport (NYMSJIA) and north of Interstate 880 (refer to Figures 1, 2, and 3) in northwestern San Jose.

For the purposes of this project, Coleman Avenue is considered the eastern boundary of the site, Newhall Street is the southern boundary of the site, the UPRR/Caltrain railroad tracks serve as the western boundary of the site, and the City limit line south of Brokaw Road is the northern boundary of the site. The portion of the property located within the City of Santa Clara is not a part of the project covered in this EIR.

C. DESCRIPTION OF PROJECT

Zoning

The project proposes a Planned Development Rezoning from *HI Heavy Industrial* to *A(PD) Planned Development* on a 92.5-acre site located in the city of San Jose to allow the development of up to three million square feet of office/R&D development. In addition, an undetermined amount of hotel, retail, and commercial uses may be constructed, but in no case would total development of the site exceed the traffic performance criteria that are equivalent to the traffic that would result from three million square feet of new office/R&D development. New development also includes parking, landscaping, public streets, internal private streets, and necessary new infrastructure. The existing approximately 1.1 million square feet of buildings on the site allowed under the existing zoning would be demolished and removed as part of the project.

The proposed Planned Development (PD) Rezoning sets general development parameters for the project but would allow flexibility for individual structures and uses. Development of the site shall conform to the development standards specified on the General Development Plan shown on Figure 4 including the notes (refer to Appendix H). Permitted uses would be those of the *CP Commercial*

Pedestrian zoning district and the *IP Industrial Park* zoning district that are presented in Appendix H. The Discretionary Actions required for the project are also listed in Section I.E. of this EIR.

The project has been divided into four areas as shown on Figure 4. The acreage of each of these areas with the maximum allowable building square footage of office/R&D uses is shown in Table 1A below. Areas 1, 2, and 3 include a total of approximately 2,233,246 square feet of which uses proposed are office/R&D. Additional commercial and hotel space could also be developed. Area 4 includes 766,754 square feet of office/R&D uses as proposed in the other three areas plus rental car facilities that would include parking areas/structures, customer facilities, administrative facilities, and vehicle maintenance facilities. In addition, commercial parking facilities would be allowed along the rear portions of Areas 1, 2, and 3, as well as on Area 4.

The mix of uses and intensity of development is limited by traffic performance criteria that consists of a maximum project trip generation of 3,534 AM Peak Hour trips (2,957 inbound and 578 outbound) and a maximum of 3,441 PM Peak Hour trips (467 inbound and 2,973 outbound). The traffic volumes and distribution are also a proposed limit of maximum development on the site. The traffic volumes and distribution through each of the 24 intersections studied in the traffic analysis and listed on the zoning application are the operative maximum traffic generations from the proposed mix of development and uses allowed on the site and constitute part of the traffic performance criteria. Fourteen of the 24 intersections are located within the City of San Jose and San Jose will track the performance of those intersections by requiring a traffic analysis with the issuance of each Planned Development Permit, as specific development is proposed for the site. The traffic analysis will confirm that traffic volumes and distribution at each intersection are within the parameters of the proposed project trip budget. Ten of the 24 intersections are located within the City of Santa Clara and performance at those intersections may be tracked by the City of Santa Clara.

TABLE 1A
CONCEPTUAL OFFICE/R&D BUILDING AREAS

Area	Approximate Area (gross acres)	Building Area (square feet)
1	18.7 acres	796,729 (26.6%)
2	24.9 acres	743,670 (24.8%)
3	23.2 acres	692,847 (23.1%)
4	25.7 acres	766,754 (25.5%)
Total	**92.5 gross acres**	**3,000,000 square feet**

The approximate areas of buildings, parking landscaping and public and private streets are shown in Table 1B, below, and are based on the Conceptual Master Site Plan for the project (Figure 5).

TABLE 1B SITE COVERAGE (Based on 3 Million Square Feet of Office/R&D Uses)		
Area	**Approximate Area (gross acres)**	**Site Coverage**
Buildings	10.2	11.0%
Landscaping	18.9	20.4%
Parking	57.4	62.1%
Private Streets	1.6	1.7%
Public Streets	4.4	4.8%
Total	**92.5 gross acres**	**100%**

Project plans have been designed to develop only parking and landscaping on approximately seven acres located on the central western edge of the site adjacent to the Union Pacific lands where future BART facilities are being considered. No buildings are proposed in this area so that it can be acquired by BART for a transit facility without necessitating the removal of buildings.

Parking

Since the proposed project consists of a variety of land uses, parking cannot be provided according to a specific zoning district. Therefore, the City of San Jose has determined that parking should be provided on the project site at a ratio of 3.2 stalls per 1,000 square feet of gross building area. The project proposes to provide approximately 9,600 parking spaces on the site in either surface parking lots or garages. Future Planned Development Permits would be required to comply with this proposed parking.

Given the site's proximity to Caltrain and the future BART station, the proposed parking supply should be sufficient to accommodate the parking demand associated with full development of the project. Connections to these facilities may be constructed in the future; however, they are not proposed as part of this project.

Building and Structure Heights

Figure 6A shows estimated building height limits for the project site as currently established by Federal Aviation Administration (FAA) standards for the Norman Y. Mineta San Jose International Airport. The City of San Jose also holds a recorded avigation easement over the project site which restricts building heights to similar limits. Figure 6B conceptually illustrates how the proposed new buildings on the project site comply with the City's existing avigation easement. Any proposed structure that would exceed these height limits would be subject to a required FAA airspace determination and City consent to modify the avigation easement. No buildings are proposed for the southeast corner of the site since that area of the site is located within the ALUC Safety Zone for Airport Runway 11-29.

Demolition and Site Clearing

Demolition of the existing buildings and removal of pavement would be accomplished by normal construction equipment. Concrete building materials and paving materials are proposed to be crushed on site either for reuse on site or export for reuse elsewhere. The applicant has indicated that the crusher would most likely be located in Area 4 (refer to Figure 4) which is approximately 1,600 feet from the nearest residential receptor. The crusher would require a permit from the Bay Area Air Quality Management District and its location and other mitigation measures to reduce potential impacts would be specified on the demolition permit issued by the City of San Jose.

Grading and Drainage

The project proposed typical grading for construction of buildings, parking structures and parking lots. Trenching for foundation footings and installation of underground utilities would be conducted. Currently nearly the entire site is covered by impervious surfaces; all but approximately 8.42 acres (approximately 9%) is covered. The project would provide approximately 18.9 acres of landscaping (approximately 20.4% of the site). Therefore, the proposed project would result in less stormwater discharge than the existing development. The project proposes to continue to use the existing storm drain system in Coleman Avenue, which has provided adequate capacity to accommodate storm runoff from the site in its current completely developed condition, although improvements to the system may be required. The project will be required to meet the requirements of the City of San Jose and the conditions of a National Pollution Discharge Elimination System Permit. This would include the use of effective, site-specific Best Management Practices for erosion and sediment control during the construction and post-construction periods. Post construction runoff will be controlled by vegetative/grassy swales, as described in Section III, F, of this EIR.

Proposed Streets

The project proposes widening Coleman Avenue along the frontage of the site as shown on Figure 5. The project proposes construction of two new four-lane public streets between Areas 1 and 2 and Areas 3 and 4 as shown on Figures 4 and 5. The right-of-way for these public streets would each be approximately 86 feet in width and each street would have signalized intersections with Coleman Avenue that allow all movements. A two-lane public street is proposed along the westerly side of the site (adjacent to the Union Pacific property) from existing Newhall Street to the northern edge of the project site. The proposed cross sections of public streets are shown on Figure 7.

A private street is proposed near the center of the site between Areas 2 and 3 as shown on Figures 4 and 5. This private street includes a one-way loop design beginning at a point about 250 feet west of Coleman Avenue. The loop includes a central landscape/open space feature occupying approximately 1.25 acres. The private street would have a signalized “T” intersection with Coleman Avenue similar to the proposed public street between Areas 3 and 4. Internal, private streets are also proposed as part of the project, bisecting Areas 1, 2, and 3 in a north/south direction, as shown on Figure 4.

The existing FMC signalized intersections and driveways will be eliminated. As part of the Interstate 880 interchange and ramp modification project, the intersection of Newhall Street and Coleman Avenue will be relocated.

Other Infrastructure and Utilities

The project proposes to connect the on-site sanitary lines to the existing sanitary lines in the project area. Currently there are two sanitary sewer mains that enter Coleman Avenue from the west, approximately 1,300 feet north of Airport Boulevard. These lines are eight and 12 inches in diameter. These mains terminate in the manholes along Coleman Avenue. From these manholes there are several lateral lines that continue to the FMC property to serve the existing development. It is anticipated that these mains would be extended within Coleman Avenue to the new proposed streets on the project site. There is also a 10-inch sanitary sewer main on the east side of Coleman Avenue, approximately 1,100 feet north of Aviation Way. This main could be extended towards Aviation Way, where it could enter the new street to be extended onto the project site.

Water Service would be provided by connection to the water main in Coleman Avenue. Electric power and telephone service would be provided by extension from existing facilities onto the site.

North San Jose Area Development Policy/General Plan Amendment

As part of the proposed project, the applicant is requesting that the project site be removed from the North San Jose Area Development Policy (NSJADP), as shown on Figure 8. The City of San Jose City Council adopted the North San Jose Area Development Policy in 1988 in an effort to resolve or reduce the transportation problems of north San Jose. Properties within the NSJADP are subject to Floor Area Ratio (FAR) limits and the overall averaging of intersection LOS operations is allowed. The LOS averaging is intended to allow development even though one or more individual intersections may exceed the LOS "D" threshold if the project conforms to an FAR maximum and the transportation system works area-wide as demonstrated by the LOS averaging formula.

The existing FAR for the site, as established by the NSJADP, is 0.35. With the elimination of the project site from the NSJADP area, there would be no FAR restrictions. The project is proposing the removal of the site from the area to develop the site at a more intense FAR of approximately 0.7.

Project Phasing

Portions of the site are undergoing cleanup procedures with the California Department of Toxic Substances Control (DTSC) due to contamination resulting from the past use and handling of hazardous materials on the site. The plans are at different stages, therefore it is anticipated that redevelopment of the site would occur in phases as remediation activities are completed. Additional environmental review for each proposed phase will be required prior to construction.

D. PROJECT OBJECTIVES

The objective of the project is to develop the site with a mixture of compatible uses consistent with San Jose's General Plan so that a major assemblage of land that is critically located can be put into economic production in response to market demands. The project will reserve and then utilize the existing/future available roadway capacity for its buildout. The site is very near the Norman Y. Mineta San Jose International Airport and midway between San Jose's Downtown and the North San Jose/Santa Clara high technology industrial areas, with nearly direct access to both Interstate 880 and US Highway 101.

Another objective of the project is to revitalize and intensify an "infill" site in San Jose that is generally vacant and underutilized, to better meet the General Plan land use designations for the project area and the economic goals and policies of the City. It is also an objective of the project to increase employment opportunities on the site, thereby assisting the City in achieving one of its primary goals of a better balance between jobs and housing. Currently and historically, San Jose has a shortfall in jobs compared to its housing units. Because of the site's location, higher than normal densities of development can be achieved to help meet these objectives.

Another objective of the project is to support the Airport with compatible off-site, airport-serving uses. Among those that may be developed are hotels, some retail, car rental, and airport parking.

E. USES OF THE EIR

The City of San Jose would be the Lead Agency under the California Environmental Quality Act (CEQA) and requires environmental review prior to considering discretionary approvals for redevelopment of the site.

The EIR may be used by the City of San Jose for the approvals of the Planned Development (PD) Rezoning and Planned Development (PD) Permits, subsequent PD Permit Amendments, tree removal, demolition, grading and building permits, tentative maps, and contracts for public improvements. The following permits may also be required:

- Permit to Operate from the BAAQMD (concrete crusher);
- NPDES permit;
- Determination of Consistency from the ALUC.

II. CONSISTENCY WITH PLANS, GOALS & POLICIES

A. CONSISTENCY WITH REGIONAL PLANS AND POLICIES

Land Use Plan for Areas Surrounding Santa Clara County Airports ALUC, September 1992

The *Land Use Plan for Areas Surrounding Santa Clara County Airports*, adopted by the Santa Clara County Airport Land Use Commission (ALUC) in September 1992, established land use policies that provide for the orderly growth of the areas surrounding the airports in Santa Clara County. The ALUC has established provisions for the regulation of land use, building height, safety, and noise insulation within areas adjacent to each of the public airports in the county. Proposals to amend the general or specific plans and either building or zoning regulations by local agencies must be submitted to the ALUC for a determination of consistency. Under State law, if the ALUC determines that a proposed project is inconsistent with the ALUC land use plan, project approval by the local lead agency requires an action by the agency's decision-making body, by a two-thirds vote, adopting specific findings overriding the ALUC determination. State law requires that general plans and specific plans pertaining to areas adjacent to airports be consistent with the ALUC Land Use Plan.

The entire FMC property is located within the ALUC's adopted project referral area for Norman Y. Mineta San Jose International Airport, with the easterly corner of the project site (approximately nine acres) located within the ALUC safety zone for Runway 11-29. The safety zone restricts the density of usage allowed within this area to an average of 10 people per acre on an annual average or a maximum of 25 people at any given time (the "10/25 rule"). The existing land uses on the FMC property largely pre-dated the creation of the ALUC. The preliminary site plan proposes surface parking, but no structures within the ALUC safety zone. This proposed rezoning will be referred to the ALUC for a determination of consistency.

Consistency: Project development is intended to be consistent with the ALUC Plan. When detailed plans for the project site are developed, such plans will be submitted to the ALUC for determination of consistency with the policies in the ALUC Land Use Plan.

Clean Air Plans

The Bay Area Air Quality Management District (BAAQMD) has adopted a number of "clean air plans" that are blueprints for improving the Bay Area's air quality to meet the requirements of the Federal and California Clean Air Acts. Among these plans are the Revised Ozone Attainment Plan (2001) and the Clean Air Plan (2000). These documents contain goals and policies aimed at the reduction of criteria pollutants such as carbon monoxide, hydrocarbons, and oxides of nitrogen. Examples of such goals and policies include controls on stationary sources of emissions and a reduction in the use of motor vehicles.

Consistency: The proposed project would contribute to local traffic in the peak hours and the peak direction. This increase in traffic would be a source of increased air pollutant emissions, which would contribute to exceedances of regional air quality standards. Construction activities associated with future development would also generate minor temporary air pollution impacts. The project does not propose to add additional jobs beyond the City of San Jose General Plan assumptions.

Since the projections in the Clean Air Plan are based on General Plan buildout, this project is consistent with the Clean Air Plan.

Santa Clara Valley Urban Runoff Pollution Prevention Program.

The Santa Clara Valley Urban Runoff Pollution Prevention Program, previously called the Santa Clara Valley Non-point Source Program, was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304(1) of the Federal Clean Water Act, which mandated that the EPA develop National Pollutant Discharge Elimination System (NPDES) Permit application requirements for various stormwater discharges, including those from municipal storm drain systems and construction sites.

The State Water Resources Control Board implemented the NPDES general construction permit for the Santa Clara Valley. For properties of one acre or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

Consistency: Development of the approximately 92.5-acre site would be required to conform to the requirements of the NPDES permitting program. The redevelopment of the site would not increase the amount of runoff currently generated by the site; however, potential impacts to the water quality of this runoff could occur during construction. Runoff-borne pollution and associated impacts will increase during construction of future development on the site. Program mitigation measures are identified to reduce the potential water quality impacts. For these reasons, the proposed project would be consistent with the provisions of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Santa Clara Valley Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Santa Clara County *Congestion Management Program* (CMP), which was last updated in May 1998. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gas tax revenues. The CMP legislation requires that each CMP contain five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element.

The Santa Clara County CMP includes sub-regional roadways within north San Jose that are identified as CMP road facilities. The existing primary CMP facilities in the immediate vicinity of the project site that would be affected by future traffic generated by the project would include Interstate 880, SR 17, US 101, and SR 87. While the project would have impacts on these facilities, Transportation Demand Measures (TDM) such as access to transit, carpooling, pedestrian access etc., are included in the Project as required by the CMP.

Consistency*:* The proposed Project would not be inconsistent with the provisions of the Santa Clara Valley Congestion Management Program.

B. CONSISTENCY WITH LOCAL PLANS AND POLICIES

San Jose 2020 General Plan

The General Plan is an adopted statement of goals and policies for the future character and quality of development of the community. Following is a summary of strategies and policies that would apply to the proposed Project.

Land Use /Transportation Diagram

The San Jose 2020 General Plan Land Use designation for the approximately 92.5-acre site is *Combined Industrial/Commercial*.

The project proposes a rezoning to *A(PD) Planned Development* zoning district in order to implement a planned development that would allow for a mixture of compatible commercial and industrial uses. Such uses could include research and development, professional offices, airport serving uses, hotels, and other supportive commercial services.

Major Strategies

Economic Development Major Strategy

The City of San Jose's Economic Development Strategy strives to make San Jose a more "balanced community" by: 1) encouraging more commercial and industrial growth to balance the existing residential development; 2) equitably distributing jobs and housing; and 3) controlling the timing of development.

Consistency: The proposed project would result in an increase in the number of jobs available on the project site and, thus, would support the citywide effort to balance the jobs/housing imbalance.[1] For these reasons, the project is consistent with the Economic Development Major Strategy.

Sustainable City Strategy

The Sustainable City Major Strategy is a statement of San Jose's commitment to becoming an environmentally and economically sustainable city. Programs promoted under this strategy include recycling, waste disposal, water conservation, transportation demand management, and energy efficiency. The Sustainable City Strategy is intended to support these efforts by ensuring that development is designed and built in a manner consistent with the efficient use of resources and environmental protection.

Future development of the site would be designed to conform to adopted San Jose 2020 General Plan policies. Compliance with those policies will ensure that the project will be designed to reduce traffic congestion and corresponding air pollution, and environmental degradation.

Consistency: The proposed project is consistent with the Sustainable City Strategy, as described in the San Jose 2020 General Plan.

[1] San Jose has a surplus of housing units in relation to the number of jobs in the City, thus creating a "jobs/housing" imbalance.

Growth Management Major Strategy

The purpose of the Growth Management Major Strategy is to find the delicate balance between the need to house new population and the need to balance the City's budget, while providing acceptable levels of service. The City's strategy for growth management can best be described as the prudent location of new development to maximize the efficient use of urban facilities and services, and, to this end, the General Plan encourages infill development within urbanized areas.

Consistency: Development of the site with office/R&D and other commercial land uses would provide infill redevelopment within an urbanized area. The project would be consistent with this Growth Management policy, as described in the San Jose 2020 General Plan.

Goals and Policies

Balanced Community Policy #1

The City should foster development patterns, which will achieve a whole and complete community in San Jose, and improve the balance between jobs and economic development with housing to the greatest extent feasible.

The proposed rezoning would be compatible with the existing and planned land uses in the area and would contribute to the supply of jobs available to San Jose's residents.

Commercial Land Use Policy #1

New commercial development should be located near existing centers of employment or population or in close proximity to transit facilities.

The proposed rezoning would facilitate the redevelopment of the site with some commercial uses near existing centers of employment in North San Jose and Santa Clara, and near an existing Caltrain station.

Commercial Land Use Policy #6

New commercial uses or expansion of existing uses within the referral areas of the Airport Land Use Commission should give appropriate consideration to ALUC policies.

The project site is located within the ALUC referral boundary. The proposed rezoning takes into consideration the ALUC policies and is compatible with the ALUC Plan. Specific development proposals on the site would be forwarded to the ALUC for review and comment. This proposed rezoning will be referred to the ALUC for a determination of consistency.

Industrial Land Use Policy #11

It is important to the City to retain viable industrial supplier/service lands. Further, new land uses that unduly restrict the industrial lands should not be allowed to locate adjacent to primary industrial areas in the City.

The proposed rezoning would introduce commercial uses into a primarily industrial area. The commercial uses allowed within the *Combined Industrial/Commercial* designation would be compatible with the industrial uses in the surrounding area (warehouse, manufacturing, and commercial uses), thus maintaining the viability of the industrial lands.

Economic Development Goals and Policies

San Jose has historically served as a bedroom community for employment located in other cities. The Economic Development Goals for the City include the creation of more job opportunities for existing residents to improve the balance between jobs and resident workers and to create a stronger tax base by obtaining a greater share of the total industrial and commercial development in the County, protecting the exclusively industrial areas from incompatible development, and by nurturing and encouraging expansion of the existing industrial and commercial development in the City.

In particular, Economic Development Policy 7 states that the City should encourage a mix of land uses in the appropriate locations which contribute to a balanced economic base, including industrial suppliers and services, commercial support services, "green industries" (industries related to recycling or environmental preservation) as well as high technology manufacturers and other related industries.

Consistency: The proposed project is the redevelopment of an under-utilized site with new office, research and development, and other commercial uses, which will contribute to a balanced economic base within the City. The proposed project would also serve to attract a diverse mixture of businesses and industries that can provide jobs suitable for the City's unemployed and under-employed labor force. Therefore, the project is consistent with the Economic Development Goals and Policies of the City of San Jose 2020 General Plan.

Level of Service Goals and Policies

The City of San Jose General Plan identifies specific service level goals for several major categories of urban services that are provided by the City, in order to reduce the effect of growth and development on municipal services. The services and facilities that are identified as important to the City's ability to accommodate economic development citywide are: sewage treatment, sanitary and storm sewers, transportation, flood protection, and fire protection. For these infrastructure facilities General Plan level of service policies require that the goals be met by individual projects.

The City of San Jose Level of Service Goals strive to provide a full range of City services to the community at service levels consistent with a safe, convenient and pleasant place to live and work. Level of Service Policy 1 states that urban service delivery priorities should be ordered as follows: 1) provide services and facilities designed to serve existing needs, 2) prevent the deterioration of existing levels of service, and 3) upgrade City service levels, when feasible. The City's level of service policies related to transportation identify level of service "D" as the minimum acceptable performance of City streets during peak travel periods. The City's goal for fire protection is to maintain a four-minute average response time to all calls.

The proposed project will meet the City's level of service policies. According to the traffic analysis in Section III. B. *Transportation and Circulation* of this EIR, mitigation is available that will ensure that the City's level of service of "D" or better is met at local intersections with development of the project.

Consistency: The proposed project is generally consistent with the relevant goals and policies of the City of San Jose General Plan.

City of San Jose Zoning Ordinance

The project site is currently zoned *HI Heavy Industrial*. The proposed project is to rezone the project site to *A (PD) Planned Development* in order to redevelop the site with up three million square feet of office/R&D and an undetermined amount of hotel, retail, and commercial uses, the total of which would not exceed the traffic performance criteria, as previously described. These proposed uses would be compatible with the surrounding land uses, both existing and planned, and would serve the adjacent Norman Y. Mineta San Jose International Airport.

Consistency: The proposed project is generally consistent with the City of San Jose's Zoning Ordinance.

San Jose International Airport Master Plan

The San Jose International Airport Master Plan Update, which was approved by the San Jose City Council in June of 1997, sets forth a comprehensive list of development projects and policies, which will allow the airport to efficiently accommodate the projected demand for commercial air transportation through the year 2010. The Master Plan improvement projects include major upgrades to the airfield, passenger terminals, air cargo facilities, parking facilities, and support facilities, construction of which is ongoing.

The Airport Master Plan is primarily limited to on-airport facilities. Off-airport land uses are not a part of the Master Plan, except to the extent that some adjacent land uses may be affected by planned transportation projects that will improve access to the airport.

Consistency: The proposed change in zoning from *HI Heavy Industrial* to *A(PD) Planned Development* zoning district to allow the development of office/R&D and commercial land uses would be consistent with the San Jose International Airport Master Plan. The project proposal includes uses such as hotels, retail, car rental, and airport parking, which are consistent with airport operations. The proposed project will not result in significant impacts to intersections that provide access to the airport, as described in Section III, B. of this EIR, since mitigation is included in the project to reduce impacts to a less than significant level.

North San Jose Area Development Policy

The proposed project is located within the North San Jose Area Development Policy area, an area that is recognized as having a deteriorating transportation level of service due to regionally generated traffic. In an effort to resolve or reduce the transportation problems, the North San Jose Development Policy was adopted by the City Council in March of 1988. The Policy includes the following two essential elements:

1. A Level of Service Policy that allows consideration of an area average instead of focusing on individual intersections; and

2. A Floor Area Ratio (FAR) policy that places a cap on the magnitude of employment and encourages housing in the impacted area. The cap provides for an average 0.35 for all vacant lands.

Under the North San Jose Area Development Policy, individual intersections within the area bounded by Interstate 880, US 101, and State Route 237 may exceed the level of service standard required elsewhere in the City of San Jose (LOS D), based upon the system of intersection averaging. However, all of the intersections within this area that are impacted by greater than one percent must function at a weighted average LOS D overall. This represents a relaxation of the City of San Jose's more stringent citywide LOS policy which requires a less than significant impact at each individual intersection.

The project proposes to remove 92.5 acres from the North San Jose Area Development Policy area and therefore, consistency with the policy would no longer be applicable. The intent of the policy was to allow development at a reasonable intensity and assure that adequate overall traffic circulation was achieved in the area. The project proposes a development intensity of approximately 0.70 FAR and would conform to the more stringent overall city-wide LOS policy, rather than allowing an overall averaging of intersection operations in the area, thereby avoiding or minimizing any significant unavoidable traffic impacts.

Consistency: The project proposes to remove the project site from the North San Jose Area Development Policy area; therefore, consistency with the policy would no longer be applicable.

North San Jose Deficiency Plan

The North San Jose Deficiency Plan was adopted by the City of San Jose to conform to the Santa Clara County Congestion Management Program (CMP) requirements, under the legislative mandate of AB1791 (Katz). The North San Jose Deficiency Plan was required because certain regional facilities (intersections) within the area fall below the LOS standard adopted for the region by the CMP.

As required by the CMP, the Deficiency Plan includes an analysis of the cause of the deficiencies, a list of improvements to correct the deficiencies, an action plan of specific measures to be implemented, and a monitoring program. The North San Jose Deficiency Plan applies to 22 designated CMP intersections in North San Jose and requires an overall average delay of no more than 86 seconds.

Consistency: The proposed project is located outside the North San Jose Deficiency Plan area. The traffic report prepared for the project did not identify any impacts to Deficiency Plan intersections; therefore, the proposed project would not cause an overall average delay within the Plan area. The project is not inconsistent with the North San Jose Deficiency Plan.

City of Santa Clara Transit Area Concept Plan

In October 2002, A Transit Area Study was prepared by the City of Santa Clara for the area surrounding the Santa Clara train station, to the northwest of the project site. This conceptual plan was presented to the Santa Clara City Council, which referred it to the Santa Clara Downtown Revitalization Committee as input for development of a Downtown Plan. The study area for the Plan is considered to be a strategic location due to its proximity to rail, a future BART station, Santa Clara University, NYMSJIA, and downtown Santa Clara. Major goals of the study were:

- to identify opportunities and constraints for adaptive reuse and infill development;
- create a community vision of the area;

- foster development of transit-supportive land uses and increase alternatives to automobile use;
- strengthen the civic identity of the area by linking historical, cultural, and educational amenities with transportation service and infrastructure;
- improve pedestrian connections and bicycle routes along travel corridors;
- enhance streetscape character;
- ensure historic resource conservation and enhance livability; and
- make implementation recommendations.

Principle 5 of the Plan encourages utilizing the future BART connection by redeveloping the portion of the FMC/Arcadia Development site within the City of Santa Clara with a high intensity of development and a diverse mix of uses. In addition, site planning should support transit and pedestrian movement and encourage residential uses with coordinated planning efforts with the City of San Jose,

Consistency: The proposed project would not be inconsistent with the Santa Clara Transit Area Concept Plan. The proposed project would develop a major employment center in proximity to future residential uses in proximity to existing rail and future BART stations. It should be noted; however, that the portion of the FMC property within Santa Clara has a deed restriction that prohibits the construction of residential uses.

III. ENVIRONMENTAL SETTING, IMPACTS, & MITIGATION

A. LAND USE

Regional Setting

The project site is located in the Santa Clara Valley, situated at the southern end of the San Francisco Bay within the Cities of San Jose and Santa Clara. The valley was historically used for agricultural production. Today, the Santa Clara Valley consists largely of urban development due, in part, to the establishment and growth of the electronics industry.

Historical Uses

In 1948, the Food Machinery and Chemical Corporation (Food Machinery) constructed a machinery plant on the project site for the production of agricultural and fire fighting equipment. Shortly thereafter, Food Machinery was awarded a government contract to construct armored personnel vehicles. To meet the demand of the Federal government, the processes of the manufacturing plant were modified for the production of armored personnel vehicles. In 1951, the corporate offices from the company's Julian Street facility were moved to the project site. In 1960, Food Machinery changed its name to FMC Corporation (FMC) to reflect the different areas of manufacturing the company had entered into. FMC manufactured and modified armored personnel vehicles, pumps and sprayers, and airline handling equipment on the project site from 1951 to 1998. From 1994 to 1997 United Defense LP has been on the site as a partner of FMC. In 1997, FMC sold its interest in United Defense. In 1999, United Defense consolidated its operations onto the property on the north of the site and no longer occupies the site.

1. Existing Setting

Existing Land Uses

The 92.5-acre project site is currently developed with approximately 1,105,199 square feet of manufacturing, office, storage, and testing facilities. A majority of the buildings are currently vacant or under-utilized. In recent years, FMC has phased out operations at this facility and some structures have been demolished as part of the ongoing hazardous materials remediation activities on the site. Table 2 lists the buildings currently on the site (see Figure 9). Most of the manufacturing and office uses are located on the eastern two-thirds of the site. The northeastern portion of the site contains an oval test track for armored personnel vehicles, with an approximately 3.75-acre concrete lined test pond in the center, a hill testing area, and a parking lot.

TABLE 2: EXISTING BUILDINGS ON SITE		
Building Number	**Building Name**	**Square Feet**
1	Plant 1	90,250
2	Plant 2	48,600
3	Plant 3	143,666
4	Plant 4	18,170
6	Plant 6 Processing	20,600
5C	Power Pack Pull	2,160
7A	Building A	23,443
7B	Shipping and Receiving	15,000
7C	Plant 7, Building C	22,100
7D	Plant 7, Building D	22,100
7E	Niagara Building (Model Shop)	7,000
7F	Dyno Building Plant 7	4,900
7G	Paint and Spray Plant 7	4,060
7H	Environmental Test Chamber (x-ray)	1,320
7I	Electronic Lab	6,750
7M	Canopy	4,800
7N	Canopy	3,150
9	Plant 9	36,297
10	Plant 10	89,050
11	Plant 11-Paint Line	11,614
14	Maintenance	16,600
15	Plant 15	206,194
16	Plant 15 Chemical and Paint Storage	15,000
20	Plate Saw Building	7,000
25A	Hold Area 9	2,400
25B	Hold Area 9	3,000
25C	Hold Area 9	1,250
27	Warm Water Wash By Plant 11	3,920
47	Paint-Main Plant	700
61	Ordnance Engineering Building	97,100
62	Engineering	23,983
63	NOB	83,000
64	Rebuilt Offices	18,972
85	Building A	8,440
90	Canopy	10,000
92A	Plant 9 Chemical Storage (Lean to)	462
92F	Lean to Plan 3 and 6	9,538
93A	12 KV Switchgear	570
95	Plant 3 Office Building	6,700
Total		**1,089,859**

Note: Building numbers are out of sequence because some of the buildings have been demolished and are no longer present on the site. See Figure 9 on the previous page for building locations. Structure #59, as shown on Figure 9, is not a building, but an overhang.

Conditional Use Permit/Cooperation Agreement

In February 1998, a Conditional Use Permit (CP97-075) was granted for Area 4 (see Figure 4) of the project site to allow the operation of a public parking lot and parking shuttle service in support of the NYMSJIA, located to the west of the site. This CUP would have expired in February 2003. In advance of the expiration of the permit, another CUP (CP02-034) was granted for this same area of the project site in August 2002, to allow the demolition of an existing 206,194 square foot warehouse building, the reconfiguration of 506 existing parking spaces, and the relocation of the entrances and exits to the parking facilities.

As part of the Interstate 880/Coleman Avenue interchange project, Newhall Street will be reconfigured and a new public street will be constructed along the western edge of Area 4 and the northern side of Area 4, adjacent to Area 3. Area 4 will experience some right-of-way take for the interchange project. This right-of-way take and the construction of the public streets are the subject of a Cooperation Agreement between the City of San Jose, the Valley Transportation Agency, and FMC and Arcadia Development, the property owners. These new public streets will provide access between existing Newhall Street and Coleman Avenue, replacing the current Coleman Avenue/Newhall Street intersection that is being relocated as a part of the I-880/Coleman interchange reconstruction project.

General Plan and Zoning

The existing City of San Jose General Plan land use designation for the project site is *Combined Industrial/Commercial*. The proposed City of San Jose Planned Development zoning would allow uses consistent with the current San Jose General Plan designation of *Combined Industrial/Commercial* such as office/R&D, hotel, car rental facilities, and retail uses.

The zoning designation is *HI Heavy Industrial*. This district is intended for industrial uses with nuisance or hazardous characteristics which for reasons of health, safety, environmental effects, or general welfare are best segregated from other uses. Typical uses permitted in the HI zoning district include industrial services, processing laboratories, medium and heavy manufacturing and assembly, establishment for the repair or cleaning of household, commercial, or industrial equipment or products, warehouses, seasonal retail sales, driving schools, photo processing, printing, and large recycling facilities. Very limited scale retail sales and service establishments serving nearby businesses and their employees may be considered appropriate where such establishments do not restrict or preclude the ability of surrounding Heavy Industrial land from being used to its fullest extent and are not of a scale or design that depends on customers from beyond normal walking distances.

Surrounding Land Uses

The project site is surrounded by a variety of land uses including industrial, public/quasi-public, and residential (see Figure 3). Manufacturing and office facilities are located to the west of the project site in the City of Santa Clara. Commercial uses are located along Coleman Avenue. East of the site, across Coleman Avenue, is the Norman Y. Mineta San Jose International Airport, with a number of airport related support uses facing Coleman Avenue. Adjacent to the western boundary of the site lie the Union Pacific Railroad tracks. South of the project site, across Newhall Street, and east of Stockton Avenue, are a variety of land uses which include approximately 30 single family residential units, an auto shop, a

homing pigeon club, a screen/window shop, a car rental agency, a limousine service, an x-ray processing warehouse, and a photography and video studio. Interstate 880 is located to the south of the site. Southeast of Interstate 880, is land designated public park and open space containing the approach zone for the Norman Y. Mineta San Jose International Airport and the Guadalupe Gardens.

Aesthetics

The primary locations from which the project site can be viewed are along Coleman Avenue and Newhall Street and from across the Union Pacific railroad tracks to the west. The existing visibility conditions are due to the flatness of the project site and the presence of surrounding development. The project site is only partially visible from the single-family residential and other mixed uses to the south, due to the configuration of the property. Figure 3 demonstrates some of the existing visual characteristics of the site and the surrounding area.

Aesthetic values are largely subjective. Individual tastes may vary significantly, particularly with regard to architectural style. The assessment of a project's visual impact is dependent upon an evaluation of the character and design of the proposed development, and the degree to which the project is visually compatible with the surrounding community. The primary criteria that are considered in this assessment include: 1) the spatial relationship of the proposed structures within the site and to neighboring land uses; 2) the mass, scale, and height of the proposed structures and their visibility from the surrounding area; 3) the degree to which the project would contrast with the surrounding development in design and materials; and 4) whether the project is likely to result in visual impacts including glare, shadows, night-time lighting requirements, or provide elevated views to nearby residences.

Site Constraints

Physical conditions on or adjacent to the site that might influence its suitability for specific land uses allowed under the proposed zoning designation include the following:

- The location of a portion of the site within the Norman Y. Mineta San Jose International Airport Land Use Commission (ALUC) safety zone and 65 CNEL contour;
- The location of the site within a City of San Jose avigation easement which restricts the height of buildings;
- The presence of high noise generators in the area, including aircraft take-offs and landings at the airport east of the site, and railroad noise to the west;
- Contamination from historic use and handling of hazardous materials;
- Existing industrial uses in the vicinity; and
- Existing residential uses to the south of the project site.

Noise and its impact on the project are discussed in greater detail in Section III. D., *Noise,* and hazardous materials are discussed in Section III. *G., Hazardous Materials* of this EIR.

2. Land Use Impacts

Thresholds of Significance

For the purposes of this project, a land use impact is considered significant if the project will:

- substantially adversely change the type or intensity of existing or planned land use in the area; or
- conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- be incompatible with surrounding land uses or with the general character of the surrounding area, including density and building height; or
- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use; or
- induce substantial growth in an area, either directly (for example by proposing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- result in the loss of existing or planned open space; or
- divide or disrupt the physical arrangement of an established community.

General Plan and Zoning

The proposed Planned Development Rezoning would set the maximum amount of square footage for proposed project, as described below. Illustrative elevations would establish a general level of quality for the project, but could be modified in the future. Minimum building setbacks, minimum parking requirements and maximum site coverage would be called out by the new zoning and would be in accordance with the City's Design Guidelines.

As previously stated, parking spaces will be provided as required at a ratio of 3.2 stalls per 1,000 square feet of gross building area. An examination of the Institute of Transportation Engineer's *Parking Generation, 2nd Edition*, shows that for the mix of uses proposed, 9,600 parking spaces should be sufficient to accommodate the parking demand associated with buildout of the project. Future Planned Development Permits would be required to comply with this proposed parking.

Land Use Conflicts

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of *land use compatibility*. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially

significant effects on human health and safety.[2] The discussion below distinguishes between potential impacts *from* the proposed project *upon* persons and the physical environment, and potential impacts *from* the project's surroundings *upon* the project itself.

Impacts upon Project from the Surrounding Area

As discussed in Section III. D., *Noise*, the site experiences high noise levels associated with aircraft and railroad operations. Some types of industrial and commercial uses would be more appropriate than others if the site is redeveloped. Potential land uses that could be developed on the site include research and development, professional offices, hotels, and other supportive commercial services.

No sensitive land uses, such as residential, are proposed on the site. The proposed industrial and commercial uses would be generally compatible with the existing manufacturing and testing facilities located in the northern portion of the project site within the City of Santa Clara. The project would also be compatible with the Norman Y. Mineta San Jose International Airport and associated uses located northeast of the project site across Coleman Avenue, and with the Union Pacific Railroad lines located along the western site boundary. As discussed in Section III.D. *Noise* of this EIR, noise attenuation will be required to ensure that noise levels are maintained at 45 Ldn interior for office and hotel uses.

◆ **The proposed commercial/industrial uses are generally compatible with the existing surrounding uses. (Less Than Significant Impact)**

Airport Compatibility

The southeasterly corner of the project site is located within the ALUC safety zone for Runway 11-29 at Norman Y. Mineta San Jose International Airport, as shown on Figures 4 and 5. In addition, the 65 CNEL contour line for the airport is located on the project site, as described in Section III. D. of this EIR. The safety zone designation requires that the density of people be restricted within this area. The safety zone includes provisions such as:

1) limiting the density of usage allowed within this area to an average of 10 people per acre or a maximum of 25 people at any given time;
2) restricting the allowed land uses to agriculture, recreational parks, storage or seasonal equipment, parking of automobiles, single-story warehouses, and municipal activities such as a sewage treatment plant; and
3) restricting the storage to less than 100 gallons of flammable liquids or toxic material per acre.

No structures are proposed for the portion of the project site located within the ALUC Safety Zone, however, parking may be placed within this area. The project will be referred to the ALUC for a determination of consistency, once specific development is proposed for the site.

Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (commonly referred to as "FAR Part 77") sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential

[2]As used in this report, "nuisance" is defined to mean "annoying, unpleasant or obnoxious" and is not to be confused with the regulatory use of the word.

structures and minimizing reflective surfaces, flashing lights, electronic interference, and other potential hazards to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects within an extended zone defined by a set of imaginary surfaces (or slopes) that radiate out for several miles from the airport's runways. The FAR Part 77 imaginary surfaces are displayed on the Airport Airspace Plan for Norman Y. Mineta San Jose International Airport. The estimated elevation limits for the proposed project site, pursuant to the Airspace Plan are shown on Figure 6A.

The penetration of an FAR Part 77 imaginary surface does not automatically imply that the proposed structure would create a safety hazard, only that the FAA must evaluate the structure against various safety criteria. In concluding its aeronautical study, the FAA makes a determination that:

1. The structure, as proposed, is not an airspace hazard, or
2. The structure as proposed is not an airspace hazard with the inclusion of specified conditions such as lighting or marking at the top of the structure, or
3. The structure as proposed is a potential airspace hazard, construction of which would result in FAA modification of established flight procedures and/or restrictions on the airport.

It should be noted that the FAA does not have the authority to approve or deny a proposed land use outside of airport property; however, should projects be approved by the City that are in conflict with FAA requirements, restrictions could be placed on the airport. It is the responsibility of the City of San Jose to ensure that proposed development complies with the notification requirements of Part 77.

The City currently holds an Avigation Easement (1983) over the property that recognizes that the property is subject to aircraft noise impacts and specified height restrictions ranging from approximately 108 feet above mean sea level (AMSL) in the southeastern portion of the site, to 208 feet AMSL in the northern and western portions of the site. In addition, a General Plan text amendment specific to the project site was adopted that requires building heights on the site to be in conformance with FAA height limit requirements.

Building heights proposed for the project site are not expected to exceed the height limit requirements of the Norman Y. Mineta San Jose International Airport as established by the FAA. If heights are proposed above those designated by the Avigation Easement, a FAA Form 7460-1 will be prepared and submitted to the FAA for a conformance determination. A No Hazard Determination from the FAA will be required, pursuant to FAR Part 77, before the City would agree to amend or update the Avigation Easement.

◆ **As currently proposed, rezoning of the project site would not cause significant land use compatibility or aircraft safety impacts. (Less than Significant Impact)**

Impacts from the Project on the Surrounding Area

In general, the proposed rezoning would be compatible with the single-family residential uses located to the south of the project site. Office/R&D, retail, hotel, car rental, and airport parking uses would be developed on the southern portion of the property. These uses, even in a more dense development, are more compatible with residential uses than those allowed

under the current *HI Heavy Industrial* zoning designation and would significantly change the general character of the project area.

The proposed rezoning does not, however, preclude the development of R&D uses on the southern portion of the site. While the project applicants do not specifically anticipate development that includes the on-site use and storage of hazardous materials, the proposed PD zoning does not prohibit such uses. Many of the high technology industries located in Santa Clara County routinely use acutely hazardous materials. While such materials can be in the form of liquids, solids, or gases, it is as gases and liquids that they are most likely to cause significant off-site consequences. As discussed in Section III. H. *Hazardous Materials*, the use of toxic gases in the southerly portion of the project site could result in releases that could affect the residential properties to the south.

◆ **The proposed rezoning would allow the redevelopment of the site with a mixture of office/R&D or commercial land uses which would be more likely to be compatible with the existing surrounding uses located south of the site than the currently allowed heavy industrial uses. (Less than Significant Impact)**

Aesthetics

The proposed development of the project site would not substantially change the visual character of the area from what currently exists and would not introduce incompatible land uses into the area. The proposed uses are considered to be more compatible with the residential uses to the south than the heavy industrial development that currently occupies the site. The project would replace existing development and would not, therefore, result in significant new light or glare impacts. Future development of the site would be subject to the City's low-pressure sodium lighting requirements, which also requires that lighting be directed away from existing residential areas.

The site is not part of any scenic views or vistas nor is it located along a scenic corridor; therefore, the project would not have any impact on scenic vistas. Building heights would be limited to those allowed in the San Jose 2020 General Plan and by FAA requirements. As future projects and building designs come forward, at the Planned Development Permit stage, they will be evaluated as to conformance with City design guidelines and standards, including visual analysis. The project is not anticipated to result in shade or shadow impacts upon adjacent residential uses since they are located to the south of the site across a public right-of-way. The proposed project is not anticipated to be visually incompatible with the surrounding development.

◆ **The proposed project would not result in significant visual or aesthetic impacts. (Less than Significant Impact)**

Loss of Open Space

The majority of the site is currently developed. Approximately seven acres of the site, near the test track area, currently remain in open space (disturbed grassland areas), as described in Section III. G. *Vegetation and Wildlife.*[3] These areas consist of several non-contiguous areas that have been subjected to human disturbance including disking. While new development

[3] While the biology report designates this area as eight acres, one acre of the previously surveyed property has been removed from the project site, resulting in seven acres of open space/Burrowing Owl habitat on the site.

would be required to conform to the City's Commercial and/or Industrial Design Guidelines, a reduction in the amount of open space on the site is anticipated. The project would require appropriate landscaping and setback areas ensuring that open space areas are provided.

◆ **Redevelopment of the site proposed by the project would not result in a significant loss of open space. (Less Than Significant Impact)**

3. Mitigation and Avoidance Measures for Land Use Impacts

Mitigation Measures Included in the Project

The following mitigation measures, in addition to those described in Section III., D. Noise, of this EIR, are included in the project to avoid or further reduce land use impacts to a less than significant level:

Hazardous Materials

- The future use, handling, and storage of hazardous materials on the project site will be conducted according to all local, state, and federal laws and regulations.

Conclusion: **The implementation of the measures listed above will avoid or further reduce land use impacts to a less than significant level. (Less Than Significant Impact)**

B. TRANSPORTATION AND CIRCULATION

The following information is based on a traffic analysis prepared for the project by *Parsons, Inc, January 2003.* The text of the traffic report is contained in Appendix B of this EIR. The calculation sheets for the traffic report are on file at the City of San Jose's Department of Planning, Building, and Code Enforcement.

1. Existing Setting

The project site is almost completely developed with existing buildings, totaling approximately 1.1 million square feet. The buildings have been used in the past for manufacturing purposes, but are now primarily vacant. Since some of these buildings (equivalent to approximately 800,000 square feet of R&D/office uses) could be occupied without the issuance of discretionary entitlements, the estimated traffic from these existing buildings has been added to the background conditions in the analysis below. In calculating the impacts from the proposed development, the estimated traffic from existing buildings is subtracted from the total project traffic. The project impact is then identified as the increment resulting from the additional amount of development allowed by the proposed project, calculated against background conditions which include the estimated traffic from existing development on the project site, as if it were fully occupied.

Existing Roadway Network

Regional Roadway Network

Regional access to the site is provided by U.S. 101, Interstate 880, and State Route 87 (Guadalupe Parkway).

U.S. 101 is an eight-lane regional freeway located northeast of the project site, which provides regional access throughout California, connecting San Jose with San Francisco and points south such as Los Angeles. Access to the site from U.S. 101 is provided north of the project site via an interchange at De La Cruz Boulevard.

Interstate 880 is a six-lane regional freeway with an auxiliary lane in the vicinity of the site. This freeway extends in a north/south direction from Oakland to San Jose, at which point it transitions into SR-17 and continues to Santa Cruz. Access to the site is provided via the Coleman Avenue interchange.

State Route 87 (Guadalupe Parkway) is a four-lane arterial located approximately one mile east of the site, east of the Norman Y. Mineta San Jose International Airport. It begins in northern San Jose at U.S. 101 and ends at SR-85 in southern San Jose. Access to SR 87 is currently provided to the project area via a signalized intersection at Hedding Street. SR 87 is scheduled to be upgraded to freeway status between Taylor Street and US 101 by the year 2003. Upon completion of this freeway, access to the project area will be provided via an interchange at Taylor Street. There will be no freeway access at Hedding Street.

Local Street Network

Local access to the site is provided by Coleman Avenue, De la Cruz Boulevard, Central Expressway, El Camino Real, Taylor Street/Naglee Avenue, Hedding Street, Brokaw Road, Reed Street, Martin Avenue, and Airport Boulevard.

Coleman Avenue is a four to six-lane arterial providing access to the site between De la Cruz Boulevard and I-880. Between I-880 and downtown San Jose, Coleman Avenue operates as a four-lane arterial. The main entrance to the project site is on Coleman Avenue at the Airport Boulevard and Aviation Way intersections. North of the site, in the City of Santa Clara, Coleman Avenue becomes De La Cruz Boulevard.

De La Cruz Boulevard is a six-lane arterial street that operates between Montague Expressway and Coleman Avenue. This facility provides access to the site from the City of Santa Clara and points west. Access to and from the site is provided via its junction with De La Cruz Boulevard in the City of Santa Clara.

Central Expressway is a four-lane limited access facility with some grade separated intersections. This facility provides access to the site from the City of San Clara and points west. Access to and from the site is provided via its junction with De la Cruz Boulevard and Coleman Avenue in the City of Santa Clara.

El Camino Real (SR 82) is a six-lane major arterial roadway extending from The Alameda in Santa Clara to Mission Street in Daly City.

Taylor Street/Naglee Avenue is a four-lane major arterial that runs in a southwest-northeast direction. Taylor Street extends eastward from The Alameda to US 101, while Naglee Avenue extends westward from The Alameda to Bascom Avenue where it becomes Forest Avenue.

Hedding Street is a four-lane arterial that runs parallel to I-880 from US 101 to Bascom Avenue, where it turns to become a true east/west route. West of Winchester Boulevard, it becomes Pruneridge Avenue. North First Street separates East and West Hedding Street.

Brokaw Road is a six-lane arterial that connects Zanker Road and North First Street with I-880 and U.S. 101. East of I-880, Brokaw Road becomes Murphy Avenue and then becomes Hostetter Road near I-680. West of U.S. 101, Brokaw Road becomes Airport Parkway.

Airport Boulevard is a two-lane roadway that generally runs in a north-south direction and connects Airport Parkway with Coleman Avenue.

Transit System

Bus Service

The Santa Clara Valley Transportation Authority (VTA) provides existing bus service on the surrounding roadway network. While only one VTA bus route (Route 304) directly serves the project site via Coleman Avenue, a number of VTA bus

routes serve the Santa Clara Transit Center, located approximately 1,000 feet west of the site, on the other side of the Union Pacific railroad tracks. There is currently no direct access from the site to the Santa Clara Transit Center or El Camino Real/The Alameda, where many local bus routes converge and serve a much wider area to the west, south, and north.

Route 304 provides service along Coleman Avenue in the vicinity of the site. Route 304 operates with limited stops between south San Jose and the Mountain View Caltrain station. The route has a weekday peak period headway of 15-30 minutes with a two-way frequency of four to eight trips per hour.

Caltrain

The closest Caltrain station to the project site is the Santa Clara Caltrain Station, located to the northwest of the project site across the Union Pacific Railroad tracks. Bus Routes 10, 22, 32, 34, 44, and 60 all provide service to this station. However, this station is currently not accessible from the project site due to the presence of the UPRR tracks between the station and the site. Connections to the Caltrain facility may be constructed in the future; however, they are not proposed as part of this project.

Bicycle and Pedestrian Facilities

According to the City of San Jose's Transportation Bicycle Network (TBN), as included in the City's General Plan, a future bicycle facility is planned for along Coleman Avenue along the project site. Sidewalks are present on both sides of Coleman Avenue along the length of the project site.

Intersections Levels of Service

The operating conditions of intersections in the project vicinity were evaluated with level of service (LOS) calculations. Level of service is a qualitative description of an intersection's operation, which can range from LOS A, or free-flow conditions, to LOS F, or jammed conditions. LOS analysis balances the capacity of an intersection with the amount of traffic that attempts to travel through it.

Methodology

The City of San Jose and the City of Santa Clara rely on Level of Service (LOS) standards and use the TRAFFIX model to determine the LOS for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average delay time for all vehicles at the intersection. Because TRAFFIX is also the intersection level of service methodology for the Congestion Management Program (CMP), both cities' methodology employs the CMP default values for the analysis parameters. An acceptable level of service for local intersections is defined by the cities' of San Jose and Santa Clara as LOS D or better. An acceptable level of service for regional (CMP) intersections is LOS E or better.

TABLE 3
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Average Stopped Delay Per Vehicle (Sec.)
A	Free flow; minimal to no delay	delay ≤ 5.0
B+ **B** **B-**	Stable flow, but speeds are beginning to be restricted by traffic condition; slight delays.	5.0 < delay ≤ 7.0 7.0 < delay ≤ 13.0 13.0 < delay ≤ 15.0
C+ **C** **C-**	Stable flow, but most drivers cannot select their own speeds and feel somewhat restricted, acceptable delays.	15.0 < delay ≤ 17.0 17.0 < delay ≤ 23.0 23.0 < delay ≤ 25.0
D+ **D** **D-**	Approaching unstable flow, and drivers have difficulty maneuvering; tolerable delays	25.0 < delay ≤ 28.0 28.0 < delay ≤ 37.0 37.0 < delay ≤ 40.0
E+ **E** **E-**	Unstable flow with stop and go; delays.	40.0 < delay ≤ 44.0 44.0 < delay ≤ 56.0 56.0 < delay ≤ 60.0
F+ **F** **F-**	Total breakdown; congested conditions with excessive delay.	delay > 60.0

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209 (Washington, D.C., 1985).

Study Intersections

The traffic analysis includes 24 existing City of San Jose and City of Santa Clara signalized intersections in the vicinity of the project site, as shown on Figure 10. Intersections which are designated as regional intersections in the CMP are denoted with an asterisk or "*".

City of San Jose Intersections:

1. Stockton Avenue/West Taylor Street
2. Coleman Avenue/West Taylor Street
3. Coleman Avenue/West Hedding Street
4. Airport Boulevard/Coleman Avenue

5. Aviation Way/Coleman Avenue
6. Route 87 SB Off Ramp/Coleman Avenue*
7. The Alameda/Naglee Avenue*
8. Route 87(Guadalupe Parkway)/Taylor Street*
9. The Alameda/Hedding Street*
10. Route 87(Guadalupe Parkway)/Hedding Street*
11. I-880/Coleman Avenue (S)*
12. I-880/Coleman Avenue (N)*

City of Santa Clara Intersections

1. Benton Street/Lafayette Street
2. Lafayette Street/Lewis Street
3. Brokaw Road/Coleman Avenue
4. De La Cruz Boulevard/Reed Street
5. De La Cruz Boulevard/Martin Avenue
6. El Camino Real/Scott Boulevard*
7. El Camino Real/Lincoln Street*
8. El Camino Real/Monroe Street*
9. El Camino Real/Lafayette Street*
10. Central Expressway/Scott Boulevard*
11. Central Expressway/Lafayette Street*
12. Central Expressway/De La Cruz Boulevard*

Note: Regional intersections are denoted with an asterisk (*).

Existing Levels of Service

The majority of existing turning movement volumes associated with the study intersections were obtained through traffic counts conducted for *Parsons*, supplemented by counts obtained from the City of San Jose, as available. The existing level of service for local and regional intersections is shown in Table 4. It should be noted that LOS determinations were not made at the SR 87/Taylor Street and SR 87/Hedding Street intersections during the existing or background conditions due to SR 87 construction.

City of San Jose Local and CMP Intersections

The existing levels of service are shown in Table 4. All of the City of San Jose study intersections currently operate at acceptable levels except for the following intersections:

- Coleman Avenue/Hedding Street operates at LOS E during the AM peak hour
- I-880/Coleman Avenue (S) operates at LOS F during the AM peak hour (CMP)

TABLE 4
LEVEL OF SERVICE SUMMARY

Intersections		Existing Condition		Background Condition		Year 2005 Condition				Project Condition				Change	
	Peak	LOS	Avg. Del. (sec)	LOS	Avg. Del. (sec)	LOS	Avg. Del. (sec)	Crit. V/C	Avg. Crit. Del. (sec)	LOS	Avg. Del. (sec)	Crit. V/C	Avg. Crit. Del. (sec)	Crit. V/C Change	Avg. Crit. Del. Change
City of San Jose Intersections															
Stockton Avenue &	AM	C+	15.9	C+	16.0	C+	15.8	0.357	15.6	C+	16.1	0.369	15.8	0.012	0.2
West Taylor Street	PM	C+	16.7	C+	16.7	B-	13.3	0.315	17.3	B-	13.2	0.315	17.3	0	0
Coleman Avenue &	AM	D	35.5	D-	39.9	**E**	52.3	1.03	70.2	**F**	101.8	1.2	155.4	0.170	85.2
West Taylor Street	PM	D	30.2	D	31.7	D	34.1	0.872	47.3	**E+**	42.5	1.003	67.7	0.131	20.4
Coleman Avenue &	AM	**E**	50.1	**F**	87.5	**E**	49.6	1.036	64.3	**F**	113.9	1.211	159.7	0.175	95.4
West Hedding Street	PM	D	28.2	D	30.1	D	28.6	0.792	27.5	D	30.3	0.882	29.8	0.090	2.3
Coleman Avenue &	AM	B	10.3	**F**	74.2	C	21.7	0.701	23.2	C-	23.0	0.883	24.9	0.182	1.7
Airport Boulevard	PM	B-	14.4	D+	26.6	C	17.9	0.650	14.9	C	18.0	0.810	15.4	0.160	0.5
Coleman Avenue &	AM	B	10.3	C+	15.8	B	10.4	0.598	8.9	C+	16.5	0.642	10.2	0.044	1.3
Aviation/FMC	PM	B+	5.8	B-	13.3	B-	14.4	0.789	16.1	**F**	99.0	1.129	137.7	0.340	121.6
Driveway															
87 SB Off Ramp &	AM	B	8.2	B	9.9	B	10.0	0.479	5.1	B	9.5	0.534	4.9	0.055	-0.2
Coleman Avenue*	PM	B	8.6	B	9.8	B	9.5	0.612	11.7	B	9.5	0.657	11.7	0.045	0
Alameda & Naglee	AM	D+	25.9	D+	25.9	D+	26.3	0.696	26.6	D+	26.7	0.699	26.8	0.003	0.2
Avenue/W. Taylor	PM	D+	26.2	C-	23.9	D	28.2	0.735	29.4	D	28.9	0.748	30.3	0.013	0.9
Street*															
Rte. 87 & West Taylor	AM	-	-	-	-	D	33.3	0.746	35.8	D	33.1	0.750	35.9	0.004	0.1
Street*	PM	-	-	-	-	D	32.6	0.719	33.6	D	30.0	0.795	33.3	0.076	-0.3
Alameda &	AM	D	34.3	D	34.5	D	36.2	0.832	39.0	D	34.7	0.844	39.9	0.012	0.9
West Hedding Street*	PM	C-	24.1	C-	24.1	D	28.7	0.643	28.0	D	29.3	0.655	28.9	0.012	0.9
Rte. 87 & Hedding	AM	-	-	-	-	B-	13.1	0.391	16.2	B	12.9	0.395	16.1	0.004	-0.1
Street*	PM	-	-	-	-	B+	6.6	0.255	11.2	B+	6.5	0.274	10.8	0.019	-0.4
I-880 &	AM	**F**	148.6	**F**	516.9	C	17.6	0.718	21.6	D	31.5	0.971	38.7	0.253	17.1
Coleman Avenue (S)*	PM	B	9.6	B	11.8	B	11.0	0.535	4.3	B	11.6	0.630	4.3	0.095	0
I-880 &	AM	B-	14.1	C-	24.0	B-	13.4	0.739	15.4	D	33.0	1.015	38.5	0.276	23.1
Coleman Avenue (N)*	PM	B	8.1	B-	14.8	B	7.4	0.659	9.0	B	9.0	0.831	11.0	0.172	2.0

TABLE 4
LEVEL OF SERVICE SUMMARY

Intersections		Existing Condition		Background Condition		Year 2005 Condition				Project Condition				Change	
	Peak	LOS	Avg. Del. (sec)	LOS	Avg. Del. (sec)	LOS	Avg. Del. (sec)	Crit. V/C	Avg. Crit. Del. (sec)	LOS	Avg. Del. (sec)	Crit. V/C	Avg. Crit. Del. (sec)	Crit. V/C Change	Avg. Crit. Del. Change
City of Santa Clara Intersections															
Benton Street &	AM	C	18.5	C	18.6	C	19.3	0.735	19.7	C	19.4	0.741	19.8	0.006	0.1
Lafayette Street	PM	C+	15.8	C+	15.8	C+	16.3	0.689	15.6	C+	16.3	0.695	15.7	0.006	0.1
Lafayette Street &	AM	B	7.6	B	7.6	B	7.7	0.471	5.1	B	7.8	0.474	5.2	0.003	0.1
Lewis Street	PM	C	20.1	C	20.2	C	20.7	0.699	22.4	C	21.1	0.712	23.0	0.013	0.6
Brokaw Road &	AM	C	18.5	C	19.2	C	19.4	0.500	15.9	C	19.6	0.530	15.7	0.030	-0.2
Coleman Avenue	PM	E+	40.9	D	29.9	D	31.3	0.852	37.7	D	30.6	0.871	38.2	0.019	0.5
De La Cruz Boulevard	AM	C	17.6	B	11.9	B	11.9	0.604	9.7	B	11.6	0.626	10.0	0.022	0.3
& Reed Street	PM	B-	14.2	B-	13.8	B-	14.2	0.610	13.9	B-	13.6	0.624	13.9	0.014	0
De La Cruz Boulevard	AM	C	21.7	C	22.0	C	22.6	0.719	20.2	C-	23.2	0.741	20.2	0.022	0
& Martin Avenue	PM	C	20.0	C	19.9	C	20.5	0.660	18.2	C	20.3	0.674	18.2	0.014	0
El Camino Real &	AM	D	31.9	D	32.3	D	33.3	0.710	30.5	D	33.1	0.731	31.9	0.021	1.4
Scott Boulevard*	PM	D	30.4	D	30.6	D	31.2	0.658	31.4	D	31.7	0.686	32.9	0.028	1.5
El Camino Real &	AM	C	18.2	C-	18.2	C	18.3	0.357	18.1	C	17.6	0.362	18.0	0.005	-0.1
Lincoln Street*	PM	C+	16.0	B	14.9	C+	15.0	0.348	13.6	B-	14.9	0.372	13.0	0.024	-0.6
El Camino Real &	AM	D	30.9	D	31.3	D	32.3	0.738	31.8	D	33.5	0.756	32.5	0.018	0.7
Monroe Street*	PM	D+	27.0	D+	27.1	D	28.0	0.563	25.4	D+	25.8	0.570	24.6	0.007	-0.8
El Camino Real &	AM	D	35.4	D	34.0	D	34.0	0.824	40.2	D	33.6	0.825	40.3	0.001	0.1
Lafayette Street*	PM	D	32.0	D	32.4	D	33.2	0.774	37.3	D	34.4	0.821	39.6	0.047	2.3
Central Expressway &	AM	E	51.9	E	51.9	E	52.2	0.621	53.2	E	52.2	0.634	53.7	0.013	0.5
Scott Boulevard*	PM	E	54.6	E	54.7	E-	59.5	0.963	72.6	E-	59.9	0.969	73.8	0.006	1.2
Central Expressway &	AM	E	53.5	E	53.7	E	54.2	0.786	56.5	E	54.6	0.811	57.4	0.025	0.9
Lafayette Street*	PM	F	69.1	F	69.9	F	80.4	1.091	108.6	F	81.2	1.096	111.3	0.005	2.7
Central Expressway &	AM	E-	57.6	E-	57.3	F	70.0	1.141	128.2	F	71.8	1.147	131.6	0.006	3.4
De La Cruz	PM	F	88.1	F	90.8	F	113.4	1.245	192.2	F	124.0	1.274	216.3	0.029	24.1
Boulevard*															

* Regional (CMP) Intersection

City of Santa Clara Local and CMP Intersections

All City of Santa Clara study intersections operate at an acceptable level of service except for the following intersection:

- Brokaw Road/Coleman Avenue operates at LOS E during the PM peak hour

- Central Expressway/Lafayette Street operates at LOS F during the PM peak hour (CMP)
- Central Expressway/De La Cruz Boulevard operates at LOS F during the PM peak hour (CMP)

Freeway Study Segments

Study area freeway segments were also evaluated for morning and evening peak hour traffic conditions using the methodology of the CMP technical guidelines. The specific freeway segments included in the analysis are listed below.

1. Route 87 from SR 85 to Capitol Expressway
2. Route 87 from Capitol to Curtner Avenue
3. Route 87 from Curtner to Almaden Expressway
4. Route 87 from Almaden to Alma Avenue
5. Route 87 from Alma Avenue to I-280
6. Route 87 from I-280 to Julian Street
7. Route 87 from Julian Street to Coleman Avenue
8. U.S. 101 from McKee to Old Oakland Road
9. U.S. 101 from Old Oakland Road to I-880
10. U.S. 101 from De La Cruz to Montague Expressway
11. U.S. 101 from Montague to Great America Parkway
12. I-280 from US 101 to McLaughlin
13. I-280 from McLaughlin to 10th Street
14. I-280 from 10th Street to SR 87
15. I-280 from I-880 to Winchester
16. I-280 from Winchester Blvd. To Saratoga Avenue
17. I-280 from Saratoga Avenue to Lawrence Expressway
18. I-880 from I-280 to Stevens Creek Boulevard.
19. I-880 from Stevens Creek Blvd. to Bascom Avenue
20. I-880 from Bascom to The Alameda
21. I-880 from The Alameda to Coleman
22. I-880 from Coleman to SR 87
23. I-880 from SR 87 to First Street
24. I-880 from First Street to US 101
25. I-880 from US 101 to Brokaw
26. I-880 from Brokaw to Montague Expressway
27. I-880 from Montague Expressway to Great Mall Parkway
28. I-880 from Great Mall Parkway to SR 237
29. SR 17 from San Tomas Expressway to Hamilton
30. SR 17 from Hamilton to I-280

The vehicular density on a freeway segment is correlated to a level of service, as shown in Table 5, below. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from High Occupancy Vehicle (HOV)/ carpool lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) should be used for segments having six or more lanes in both directions, and a capacity of 2,200 vphpl should be used for segments having four lanes in both directions. The CMP defines an acceptable level of service for freeway segments is defined as LOS E or better.

TABLE 5
FREEWAY SEGMENT LEVEL OF SERVICE DEFINITION

Level of Service	Density (Vehicles/Mile/Lane)
A	< 10.0
B	10.1 – 16.0
C	16.1 – 24.0
D	24.1 – 46.0
E	46.1 – 55.0
F	> 55.0

Freeway Segments Existing Levels of Service

The most recent freeway traffic volumes and densities on US 101, I-880, I-280, Route 87, and Route 17 were obtained from the *2000 CMP Monitoring and Conformance Report*, prepared by the VTA. Almost all of the freeway segments within the vicinity of the project currently operate at LOS F under either or both AM or PM peak hours. These freeway segments are as follows (NB refers to northbound; SB refers to southbound, etc.):

- Route 87 from Capitol to Curtner — LOS F NB during AM peak hour
- Route 87 from Curtner to Almaden — LOS F NB during AM peak hour; LOS F SB during PM peak hour
- Route 87 from Almaden to Alma — LOS F NB during AM peak hour; LOS F SB during PM peak hour
- Route 87 from Alma to I-280 — LOS F SB during PM peak hour
- Route 87 from I-280 to Julian Street — LOS F NB during AM peak hour; LOS F SB during PM peak hour
- Route 87 from Julian Street to Coleman Ave — LOS F NB during AM peak hour
- U.S. 101 from McKee Road to Old Oakland Road — LOS F NB during AM peak hour
- U.S. 101 from Old Oakland to I-880 — LOS F NB during AM peak hour; LOS F SB during PM peak hour
- U.S. 101 from De La Cruz to — LOS F SB during PM peak hour
- Montague Expressway
- U.S. 101 from Montague to Great America Parkway — LOS F SB during PM peak hour
- I-280 from US 101 to McLaughlin — LOS F NB during AM peak hour

• I-280 from McLaughlin to 10th Street	LOS F NB during AM and PM peak hours
• I-280 from 10th Street to SR 87	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-280 from I-880 to Winchester Blvd.	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-280 from Winchester Blvd.	LOS F WB during AM peak hour
• to Saratoga Avenue	LOS F EB during AM peak hour
• I-280 from Saratoga Avenue to Lawrence Expressway	LOS F WB during AM peak hour
• I-880 from I-280 to Stevens Creek	LOS F NB during AM peak hour
• I-880 from Stevens Creek to Bascom	LOS F NB during AM peak hour
• I-880 from Bascom to The Alameda	LOS F NB during AM peak hour
• I-880 from The Alameda to Coleman	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-880 from Coleman to SR-87	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-880 from SR 87 to First Street	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-880 from First Street to US 101	LOS F NB during AM peak hour LOS F SB during PM peak hour
• I-880 from US 101 to Brokaw Rd.	LOS F NB during AM and PM peak hours LOS F SB during PM peak hour
• I-880 from Brokaw Rd. to Montague Expressway	LOS F SB during PM peak hour
• I-880 from Montague Expressway to Great Mall Parkway	LOS F NB during PM peak hour LOS F SB during PM peak hour
• I-880 from Great Mall Parkway to SR 237	LOS F NB during PM peak hour
• SR 17 from Hamilton Avenue to I-280	LOS F NB during AM peak hour

Background Conditions

Background conditions are defined as existing traffic volumes, traffic associated with potential occupancy of existing FMC buildings, plus traffic generated from approved projects in the vicinity. Background information for this project was estimated by adding existing volumes to the Approved Trip Inventory (ATI) volumes obtained from the City of San Jose and the City of Santa Clara. For purposes of this study, as previously described, approximately 800,000 square feet of general manufacturing uses associated with the FMC site were assumed as part of the ATI.

City of San Jose Local and CMP Intersections

As indicated in Table 4, under background conditions, the following City of San Jose study intersections are projected to operate at an unacceptable level of service. These intersections are as follows:

- Coleman Avenue/ Hedding Street — LOS "F" during the AM peak hour
- Airport Boulevard/Coleman Avenue — LOS "F" during the AM peak hour
- I-880/Coleman Avenue (S) — LOS "F" during the AM peak hour (CMP)

City of Santa Clara Local and Regional Intersections

As indicated in Table 4, under background conditions all local study intersections in Santa Clara will continue to operate at an acceptable level of service D or better. The intersection of Coleman Avenue and Brokaw Road is expected to improve under background conditions from LOS E to LOS D, due to programmed improvements, which have been funded for this intersection. Under background conditions, three CMP intersections in the city are projected to operate at an unacceptable level of service of F. These intersections are as follows:

- Central Expressway/Lafayette Street — LOS "F" during the PM peak hour (CMP)
- Central Expressway/De La Cruz Blvd. — LOS "F" during the PM peak hour (CMP)

Year 2005 Base Conditions

Year 2005 conditions are defined as the combination of background conditions, plus the finished Route 87/Taylor Street and the I-880/Coleman interchange projects. Currently, Route 87 is a four-lane expressway between Julian and U.S. 101 with signalized intersections at Mission Street, Hedding Street and Airport Parkway. The proposed Route 87 project will convert this four-lane expressway to a six-lane freeway with interchanges at Taylor Street and Skyport Drive. Historically, Route 87 (Guadalupe Parkway) traffic could utilize either Taylor Street or Hedding Street to access Coleman Avenue. Upon completion of the Route 87 Freeway Project, only Taylor Street will be available to provide freeway access to Coleman Avenue, via a single point urban interchange at Route 87. There will no longer be a direct connection between Route 87 and Hedding Street upon completion of the Route 87 Freeway Project.

In addition to the Route 87 upgrades, the City of San Jose, the VTA and Caltrans are working cooperatively on a project to reconstruct the I-880/Coleman Avenue interchange. A project report and an EIR have been prepared and the project is funded for construction, with construction anticipated to begin in 2003. The existing interchange does not meet current Caltrans design standards, nor does it adequately accommodate traffic demand. The proposed reconstruction will include replacing the existing bridge over I-880 and modifying all of the existing on-ramps and off-ramps. In order to improve traffic operations, the project also includes modifications to Coleman Avenue, Airport Boulevard, and Newhall Street in the proximity of the interchange.

Year 2005 base traffic volumes, in conjunction with the expected roadway network configuration (including the reconstruction of the I-880/Coleman Avenue interchange), were used as inputs to calculate year 2005 base condition levels of service at signalized intersections.

City of San Jose Local and Regional Intersections

As shown in Table 4, the following City of San Jose local study intersections are expected to operate at a level of service "E" or worse under year 2005 base conditions:

- Coleman Avenue/Taylor Street — LOS "E" during the AM peak hour
- Coleman Avenue/Hedding Street — LOS "E" during the AM peak hour

City of Santa Clara Intersections

As shown in Table 4, all City of Santa Clara local study intersections are expected to operate at an acceptable level of service "D" or better under year 2005 base conditions. All CMP intersections are expected to operate at acceptable levels of service, with the following exceptions:

- Central Expressway / Lafayette Street — LOS "F" during PM peak hour (CMP)
- Central Expressway /De La Cruz Boulevard — LOS "F" during AM and PM peak hours (CMP)

2. Transportation Impacts

Thresholds of Significance

For the purposes of this project, a transportation impact is considered significant if the project would:

- cause a local intersection within the City of San Jose or Santa Clara to degrade from LOS D to E or F; or
- for a local intersection already operating at an unacceptable level (LOS E or F), to cause both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by one percent or greater; or
- cause a regional intersection (CMP) to deteriorate to LOS F; or
- increase the critical movement delay by four or more seconds and critical V/C increases 0.01 or more seconds at a regional intersection operating at LOS E or F under background conditions; or
- a freeway segment operating at LOS E or better under existing conditions changes to LOS F under project conditions; or
- contribute traffic that is more than one percent of capacity to a freeway segment operating at LOS F; or
- result in inadequate emergency access; or
- result in inadequate parking capacity; or
- substantially increase hazards due to a design feature or incompatible uses.

Methodology

The traffic which could potentially be generated by existing development on the site, based on existing buildings (800,000 square feet), was subtracted to yield net generated trips, as previously described under existing conditions. Therefore the traffic analysis analyses the impacts of adding the equivalent of 2.2 million square feet of office/R&D development on the site and replacing the equivalent of 800,000 square feet of existing office/R&D with new development. This traffic analysis does not account for any additional impacts of removing existing buildings on the site that would result in the elimination of the traffic they would generate from the background traffic conditions.

The amount of traffic associated with a particular project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amount of traffic entering and exiting the site is estimated on both a daily and a peak-hour basis. In the second step, the directions which travelers use to approach and depart the site are estimated. Vehicle trips are then assigned to specific streets and intersections in the third step. The use of this process in the context of the proposed project analysis is described in the following sections.

Trip Generation

The traffic generated by the project was estimated by applying the appropriate vehicular trip generation rates to the project development land uses as described in the project description and illustrated on the site plan. The trip generation rates used for the analysis were obtained from a City of San Jose Department of Public Works publication entitled *Interim Guidelines for Traffic Impact Analysis of Land Use Development*, dated 1994.

Table 6 details the trip generation forecast for Phase II of the proposed project. Phase II constitutes the development of 2.2 million square feet of development beyond Phase I, for a total land development of 3.0 million square feet of R&D/office space.

TABLE 6
TRIP GENERATION ESTIMATES

Use	Size (sq. ft.)	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
R&D	1,500,000	12,000	1,536	384	1,920	168	1,512	1,680
General Office	1,500,000	-	1,421	194	1,614	299	1,461	1,761
Sub-total	3,000,000		2,957	578	3,534	467	2,973	3,441
Existing Uses Trip Credit	800,000		(861)	(117)	(978)	(166)	(810)	(976)
Total	**2,200,000**		**2,096**	**461**	**2,556**	**301**	**2,163**	**2,465**

*City of San Jose, "Interim Guidelines for Traffic Impact Analysis of Land Developments, "Common Vehicular Trip Generation Rates for the City of San Jose.
**Institute of Transportation Engineer (ITE) Rates

For the purposes of the traffic analysis, trip generation and distribution was based upon research and development and general office uses, since they are expected to be the most likely major uses of the site. It should be recognized the actual peak hour trip generation and its directionality (inbound and outbound) in the traffic analysis is specified on the proposed zoning documents for the project. Therefore, whatever mix of uses that may eventually be developed on the site, will be limited by the traffic performance criteria associated with three million square feet of office/R&D development and an undetermined amount of hotel, retail, and commercial uses as shown in the table above and as specified on the General Development Plan notes. The zoning further specifies allowable volumes through each of the 24 intersections.

Trip Distribution

The distribution of research and development trips was estimated based on the City of San Jose TRANPLAN traffic model and VTA's commute service survey of employees' place of residence. The regional trip distribution pattern is illustrated on Figure 11.

Trip Assignment

The trips generated by the proposed Phase II development were assigned to the roadway system based on the general directions of approach and departure discussed above. The assigned project trips are shown on Figure 12 of the traffic report (Appendix B).

Intersection Level of Service Impacts

As specified by the CMP, City of San Jose, and City of Santa Clara requirements, individual intersections are analyzed under project conditions and are compared to year 2005 base conditions. Project conditions reflect the net addition of peak-hour trips associated with the proposed development, added to the year 2005 base volumes. Intersection level of service calculations were conducted to evaluate the impacts of the proposed project.

City of San Jose Local Intersections

As indicated in Table 4, under project conditions, City of San Jose local intersections would be significantly impacted from the proposed project. These intersections are as follows:

Coleman Avenue/Taylor Street	LOS E to LOS F during the AM peak hour
Coleman Avenue/Hedding Street	LOS E to LOS F during the AM peak hour LOS D to LOS E during the PM peak hour
Coleman Avenue/Aviation Way	LOS B to LOS F during the PM peak hour

Where the LOS remains unchanged, the change in critical volume to capacity ratio and/or the change in critical movement delay triggered a significant impact. All other local intersections would operate at an acceptable level of service.

- **The project would cause significant impacts, under project conditions, to three local City of San Jose intersections. (Significant Impact)**

City of Santa Clara Intersections

According to the City of Santa Clara LOS standards, the project traffic would not cause a significant impact on City of Santa Clara study intersections under the project condition. The intersection of Central Expressway/Lafayette Street is projected to continue to operate at an unacceptable level of service, however, the project would not add to its condition. One City of Santa Clara intersection would be affected by the project and would remain at LOS F, as shown below. All other CMP study intersections would continue to operate at acceptable levels of service under project conditions.

Central Expressway/De La Cruz Boulevard	Remains LOS F during both peak hours

In those cases where the level of service remains unchanged, the change in critical V/C ratio and/or the change in critical movement delay trigger a significant impact.

◆ **Development of the proposed project would not worsen conditions at the Central Expressway/De La Cruz Boulevard CMP Intersection. (Less than Significant Impact)**

Site Access Intersections

Access to the site would be consolidated into three signalized access/egress locations: Coleman Avenue and Aviation Way, Coleman Avenue/ FMC Mid-block Driveway and Coleman Avenue and Coleman Avenue and New FMC Access/Newhall Street. The existing FMC driveway at Coleman Avenue and Airport Boulevard will be removed and relocated approximately 400 feet to the north. It is proposed that the existing access to Newhall Street from Coleman Avenue would be closed, due to the reconstruction of the I-880/Coleman Avenue Interchange, and rerouted through the project site with a signalized intersection. The existing and background traffic volumes on Newhall Street and the existing FMC driveway were re-distributed for the purposes of the project impact analysis. The project entrance intersections will operate at a level of service D or better during both the AM and PM peak hours.

◆ **After project development, the entrance intersections for the project will operate at LOS D or better during both the AM and PM peak hours. (Less than Significant Impact)**

Freeway Operations

The project would add greater than one percent capacity to 16 freeway segments that are currently operating at an LOS of F. The impacted freeway segments are as follows:

• SR 87, Capitol Expressway to Curtner Avenue	NB direction during AM peak hour
• SR 87, Curtner Avenue to Almaden Expressway	NB direction during AM peak hour SB during the PM peak hour
• SR 87, Almaden Expressway to Alma Avenue	NB direction during AM peak hour SB during the PM peak hour
• SR 87, Alma Avenue to I-280	SB direction during PM peak hour

• SR 87, I-280 to Julian Street	NB direction during AM peak hour SB direction during the PM peak hour
• SR 87, Julian Street to Coleman Avenue	NB direction during the AM peak hour
• I-280, I-880 to Winchester Boulevard	NB direction during the AM peak hour
• I-280, Saratoga to Lawrence Expressway	WB direction during AM peak hour
• I-880, I-280 to Stevens Creek	NB during the PM peak hour
• I-880, The Alameda to Coleman Avenue	SB during the PM peak hour
• I-880, Coleman Avenue to Route 87	NB direction during AM peak hour
• I-880, North First Street to U.S. 101	NB direction during AM peak hour
• I-880, U.S. 101 to Brokaw Road	NB direction during AM and PM peak hours
• I-880, Montague Expressway to Great Mall Parkway	NB direction during PM peak hour
• Route 17, San Tomas to Hamilton	NB direction during AM peak hour
• Route 17 from Hamilton to I-280	NB direction during AM peak hour

◆ **The proposed project would add greater than one percent capacity to 16 freeway segments already operating at a level of service F. (Significant Impact)**

Transit Impacts

The *CMP Guidelines for Transportation Impact Analyses* states that the evaluation of transit facilities shall consider the following project related effects:

1. Substantial growth or concentration of population beyond the capacity of existing or planned transit facilities.
2. Increased demand for transit service to such a degree that accepted service standards are not maintained.
3. Reduction of transit availability or interference with existing transit users on a permanent or temporary basis.
4. Project location more that ¾ mile from existing or planned transit services, with the potential for generating a demand for such services.
5. Congestion increases that affect transit services, e.g. delays worsen on a roadway that a specific transit route serves.
6. Identification of facilities that provide better access to transit facilities and bus stops, e.g. sidewalk from project parking lot.

Regarding the first transit evaluation criterion, the proposed project would be a significant employment land use that is adjacent to and/or nearby existing transit services. Funds have been programmed to improve facilities and services along the Caltrain commuter rail line. Funds have also been programmed to extend BART adjacent to the project site.

Transit evaluation criteria numbers 3 and 4 are not applicable. However, as a result of the project, there would be an increased demand for transit service (transit evaluation criteria number 2). Employees have the option of using public transportation to access the project site. The Valley Transportation Authority (VTA) is also developing a Commute Services Plan to improve transit services between the twelve largest job centers in the county and

residential development. The project site is directly served by VTA route 304. It is suggested that VTA bus stops be located near the north end of the project site.

Public sidewalks are proposed to be incorporated with the development of the site along the Coleman Avenue site frontage. It is also suggested that the project site plan, conceptually illustrated on Figure 4, implement adequate and direct sidewalks between the project's employment sites and the street frontage along Coleman Avenue. With the inclusion of such sidewalks, there would be no impact to transit facilities.

- **Development of the proposed project would not result in significant transit impacts. (Less Than Significant Impact)**

Project Condition Bicycle and Pedestrian Impacts

The *CMP Guidelines for Transportation Impact Analyses* states that the evaluation of bicycle and pedestrian facilities shall consider the following project related effects:

1. Any modifications or elimination of existing bicycle and pedestrian facilities, bicycle lanes, routes and paths, and expressway shoulders used for bicycle travel due to proposed project and roadway mitigations.
2. Effects on future bicycle plans, including review of local jurisdictions' bicycle plans.
3. Bicycle and pedestrian facilities that the project proposes.

A future bicycle facility is planned for along Coleman Avenue, adjacent to the project site. With the development of the proposed project, right-of-way along the Coleman Avenue frontage will be dedicated for widening Coleman Avenue. The roadway widening will accommodate the City's future bicycle facility. Development of the project will therefore, have a positive impact on future bicycle plans.

- **The project would have no impact on bicycle plans and may impact pedestrian facilities favorably. (No Impact)**

Site Circulation and Access Impacts

Site circulation, access and parking proposals contained within the FMC Redevelopment Site Plan were reviewed within the context of the Transportation Impact Analysis for consistency with accepted traffic engineering principles. Coleman Avenue will provide the primary access to the site via three signalized intersections. As the conceptual site plan envisions reconstruction of the entire site to accommodate the proposed land development scenarios, all site driveways, access roadways, internal site circulation roadways, and sidewalks will be sized to accommodate projected needs. Generally, all internal circulation roadways will be four lanes in width and may have painted or landscaped medians to provide sheltered left-turn access to the site parking supplies. As such, the conceptual location and design of the internal roadways should be sufficient to provide both safe and efficient vehicular movement into, through, and out of the proposed site.

- **The project would have adequate site circulation and access for both safe and convenient vehicular ingress and egress and interior site circulation. (Less Than Significant Impact)**

The *CMP Guidelines for Transportation Impact Analyses* state that the evaluation of parking demand shall consider the following project related effects:

1. The parking analysis must explicitly discuss the relationship between the project's parking supply, parking demand and parking costs (if any) to vehicle trip reductions applied to the project.

2. The parking analysis shall consider the adequacy of parking supply compared to demand, and fully explain any shared parking assumptions.

3. The parking assessment should identify carpool and bicycle parking and storage to be provided by the project.

A parking supply of 9,600 parking spaces is proposed (at a ratio of 3.2 spaces per 1,000 square feet) to accommodate 3.0 million square feet of R&D/office/commercial development. Given the site's proximity to Caltrain and a future BART station, and when compared to the parking generation rates published in the ITE's *Parking Generation, 2nd Edition*, the proposed parking supply should be sufficient to accommodate the parking demand associated with buildout of the project. Future Planned Development Permits would be required to comply with this proposed parking.

The Americans with Disabilities Act (ADA) requires that parking be provided for handicapped drivers. The number and location of spaces signed and striped for handicapped individuals shall be designed to conform with city and State code requirements. The site development plan will be subject to review and approval by the City of San Jose. No impacts were found and no mitigation is required (as measured by evaluation criteria number 2).

The FMC redevelopment plan will include a range of measures to reduce single-occupant vehicle use, including carpool and vanpool parking spaces, bicycle racks, and by providing employees with incentives to carpool and/or utilize transit. These incentives would include offering VTA Ecopasses. The number and location of carpool and vanpool spaces and bicycle racks will be shown on development plans and subdivision maps to be submitted for the project. It is anticipated that there will be no significant impact, as measured by evaluation criteria number 3. The City of San Jose will review final construction plans that will stipulate the number and location of carpool and bike parking spaces.

◆ **The proposed project would provide adequate parking of 9,600 spaces, would provide parking for handicapped drivers, and would include a range of measures aimed at reducing single-occupant vehicle use. (Less than Significant Impact)**

3. Mitigation Measures for Traffic Impacts

The following mitigation measures are included in the project to reduce traffic impacts to a less than significant level:

Mitigation Measures Included in the Project

City of San Jose Intersections

- *Coleman Avenue/Taylor Street* – For the eastbound approach, remove the exclusive right-turn lane and add an additional eastbound left-turn lane, as shown on Figure 12. For the southbound approach, remove the exclusive right-turn lane and add an additional southbound left-turn lane. For the westbound approach, remove the exclusive right-turn lane and add a free right-turn lane. Signal modifications will also be implemented.
- *Coleman Avenue/Hedding Street* – As shown on Figure 13, for the eastbound approach, remove the exclusive right-turn lane and add an additional eastbound left-turn lane. With the reconstruction of the 880/Coleman interchange, the southbound approach will be two left-turn lanes, two through lanes, and one right-turn lane. The mitigation for this approach is one left-turn lane, two through lanes and one through/right-turn lane. Coleman Avenue, south of the intersection will need to be widened for a short distance to receive traffic flows from this mitigation. Right-of-way for this improvement will be dedicated by the owner of the property located at the southwest corner of the intersection. Signal modifications will also be implemented.
- *Coleman Avenue/Aviation Way* – As shown on Figure 14, for the eastbound approach, add one lane so that there is one left-turn lane, one left turn/through lane, and two right-turn lanes. Signal modifications will also be implemented.

Freeway Mitigation Measures

Mitigation for freeway impacts would require adding lanes to the freeways. This is not practical for one development to implement. When project mitigation measures on CMP facilities are not feasible or fail to improve level of service to the CMP's LOS standard, then a CMP approved Deficiency Plan must be prepared. Pending the adoption of the Countywide Deficiency Plan, a local deficiency plan does not need to be prepared; instead *Deficiency Plan Immediate Actions* are required to be implemented as part of the project's approval. The following measures are proposed by the project:

Under these circumstances, section 10.6 of the May 1998 CMP Guidelines requires implementation of the "Immediate Actions" identified in Appendix D of the guidelines. Implementation of selected items from the "Immediate Implementation Action List" (shown in Table 16 of the traffic report, Appendix B) is therefore recommended. The selection of the final items from this list would be determined by the City of San Jose. With implementation of these items, project mitigation would be in conformance with CMP guidelines:

- Provide design elements such as well-lit pedestrian/bicycle paths and bicycle racks and lockers near employee entrances to encourage pedestrian and bicycle modes of travel.
- Building entrances should be located as closely as possible to likely transit connections.
- Designate approximately 2% of on-site parking spaces located near employee entrances for exclusive use by carpools or other high occupancy vehicles.
- Provide public information programs for carpooling and transit use.
- The Santa Clara Caltrain station and the future BART station are/will be located approximately 1,000 feet to the west of the FMC site, on the other side of the UPRR railroad tracks. Connections to these facilities may be constructed in the future; however, they are not proposed as part of this project.

■ The proposed developer of the site will implement a Master Transportation Demand management (TDM) program and will periodically inform the City of the status of the program that may include the following elements:

- Designation of an on-site Transportation Demand Management (TDM) coordinator to implement and monitor utilization of public transportation measures to encourage HOV and other trip diversion programs.
- Provision of physical improvements, such as sidewalks, landscaping, the installation of bus shelters, bicycle parking, and the operation of a shuttle to the nearby transit center that would act as incentives for pedestrian, bicycle and transit modes of travel.
- Implement a vehicle-trip reduction program and provide employees with incentives to carpool and/or utilize transit. Transit subsidies through the ongoing VTA Ecopass program will be offered to all employees of the site.
- Provision of emergency transportation for employees who use public transportation.

Mitigation to be Implemented by Others

- *Central Expressway/De La Cruz Boulevard* (CMP) – For the eastbound approach, add one left turn lane. Signal modifications will also be implemented. The project design is currently underway by Santa Clara County Roads and Airports Department and implementation is funded by both the County and the City of San Jose.

Conclusion: **With implementation of the mitigation measures described above, the proposed project would not result in significant traffic impacts to City of San Jose, City of Santa Clara, or CMP intersections. (Less than Significant with Mitigation) The project would however, result in a significant unavoidable impact to freeway segments. (Significant Unavoidable Impact)**

C. AIR QUALITY

The following discussion is based upon an air quality analysis conducted for the project by *MO'C Physics Applied, Consulting Air Quality Specialist* (February 2000). This analysis was updated in June 2002 by *Don Ballanti, Certified Meteorologist*. These analyses calculated the project's air quality impacts using the assumptions included in the project's traffic analysis prepared by *Parsons Transportation Group.* A copy of the original and updated air quality analyses are presented in Appendix C of this EIR.

1. Existing Setting

Air Pollution Climatology

The amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant determine the amount of a given pollutant in the atmosphere. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

Northwesterly and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward San Jose, particularly during the summer months. Winds are lightest on the average in fall and winter. Every year during the fall and winter there are periods when winds are very light and local pollutants build up in the atmosphere.

Mixing in the atmosphere both vertically and horizontally can dilute pollutants. Vertical mixing and dilution of pollutants are often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of both the morning and afternoon hours. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The North Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Hayward Hills on either side of the North Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to the south, carrying air pollution from the northern Peninsula toward San Jose.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution give San Jose a relatively high atmospheric potential for air pollution compared to other parts of the San Francisco Bay Air Basin.

Ambient Air Quality Standards

Both the U. S. Environmental Protection Agency (EPA) and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each

pollutant are described in criteria documents. The federal and California state ambient air quality standards are summarized in Table 7 for important pollutants. Table 7 identifies the major criteria pollutants, characteristics, health effects and typical sources. The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California State standards are more stringent. This is particularly true for ozone and particulate matter (PM_{10})[4].

TABLE 7

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	0.12 PPM 0.08 PPM	0.09 PPM --
Carbon Monoxide	8-Hour 1-Hour	9.0 PPM 35.0 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide	Annual Average 1-Hour	0.05 PPM --	-- 0.25 PPM
Sulfur Dioxide	Annual Average 24-Hour 1-Hour	0.03 PPM 0.14 PPM --	-- 0.05 PPM 0.25 PPM
PM_{10}	Annual Average 24-Hour	50 $\mu g/m^3$ 150 $\mu g/m^3$	30 $\mu g/m^3$ 50 $\mu g/m^3$
$PM_{2.5}$	Annual 24-Hour	15 $\mu g/m^3$ 65 $\mu g/m^3$	-- --

PPM = Parts per Million

$\mu g/m^3$ = Micrograms per Cubic Meter

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants.

Ambient Air Quality

The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. The monitoring site closest to the project site is on Fourth Street in downtown San Jose, about two miles west of the project site. Table 8 summarizes exceedances of state and federal standards at the downtown San Jose monitoring site during the period 1999-2001. Table 8 shows that ozone and PM_{10} exceeded the state standards in the project area.

Of the three pollutants known to at times exceed the state and federal standards in the project area, two are regional pollutants. Both ozone and PM_{10} are considered regional pollutants in

[4] PM_{10} refers to particulate matter less than ten microns in diameter.

that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Thus, the data shown in Table 8 for ozone and PM_{10} provide a good characterization of levels of these pollutants on the project site.

TABLE 8
SUMMARY OF AIR QUALITY DATA FOR DOWNTOWN SAN JOSE

Pollutant	Standard	Days Exceeding Standard in:		
		1999	2000	2001
Ozone	Federal 1-Hour	4	0	0
Ozone	State 1-Hour	0	0	1
Ozone	Federal 8-Hour	0	0	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	5	2	2
$PM_{2.5}$	Federal 24-Hour	2	0	0

Carbon monoxide is a local pollutant, i.e., high concentrations are normally only found very near the sources. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas". Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

Federal Air Quality Program

The Bay Area had until recently attained all federal standards. In August of 1998 the U.S. Environmental Protection Agency (EPA) reclassified the Bay Area from "maintenance area" to "nonattainment" for ozone based on violations of the federal standards at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone in 1995. Reclassification requires an update to the region's federal air quality plan.

Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and PM_{10}. The county is either attainment or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year average over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule".

Sensitive Receptors and Major Air Pollutant Sources

The BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, elderly, acutely and/or chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest sensitive receptors to the project site include the existing residential neighborhood located to the south of the site, south of Newhall Street. Pollutant characteristics are described below.

TABLE 9

POLLUTANT CHARACTERISTICS

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog.	• Eye irritation • Respiratory function impairment.	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	Carbon Monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream. • Aggravation of cardiovascular disease. • Fatigue, headache, confusion, and dizziness. • Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	• Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide	Sulfur Dioxide is a colorless gas with a pungent, irritating odor.	• Aggravation of chronic obstruction lung disease. • Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM_{10}	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	• Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

2. Air Quality Impacts

Thresholds of Significance

For the purposes of this project, an air quality impact is considered significant if the project would:

- conflict with or obstruct implementation of the applicable air quality plan; or
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); or
- expose sensitive receptors to substantial pollutant concentrations; or
- create objectionable odors affecting a substantial number of people.

Local Impacts

On the local scale, the project would change traffic on the local street network, changing airborne carbon monoxide levels along roadways used by project traffic. Carbon monoxide is an odorless, colorless poisonous gas whose primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads.

Carbon monoxide concentrations under worst-case meteorological conditions have been predicted for signalized intersections affected by the project. PM peak traffic volumes were applied to the CALINE-4 dispersion model to predict the maximum 1 and 8 hour concentrations near these intersections. The CALINE-4 model and the assumptions made in its use for this project are described in Appendix C of this EIR.

Table 10 shows the results of the analysis for the peak 1-hour and 8-hour traffic periods in parts per million (ppm) for all project conditions. The 1-hour values are to be compared to the federal 1-hour standard of 35 ppm and the state standard of 20 ppm. The 8-hour values in Table 10 are to be compared to the state and federal standards of 9 ppm. The project is not expected to exceed any state or federal standard for carbon monoxide. Traffic from the proposed project would increase concentrations by up to 0.5 ppm, but concentrations would remain below the most stringent state or federal standards. Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute significantly to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less than significant.

TABLE 10

WORST CASE CARBON MONOXIDE CONCENTRATIONS (PPM)

Intersection	Existing (2002)		Existing+ Background (2002)		Baseline (2005)		Baseline +Project (2005)		Baseline+ Project+ Cumulative (2005)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Coleman Ave./ W. Taylor St.	12.3	7.4	12.6	7.6	11.0	6.6	11.3	6.7	12.4	7.5
Coleman Ave./ W. Hedding St.	12.6	7.5	13.0	7.9	11.2	6.7	11.5	6.9	12.6	7.7
Coleman Ave./Brokaw Rd.	12.4	7.4	12.7	7.6	11.0	6.6	11.5	6.9	12.6	7.4
Alameda/Naglee/ W. Taylor St.	11.9	7.1	12.0	7.1	10.5	6.2	10.5	6.2	10.5	6.2
Alameda/W. Hedding St.	12.0	7.2	12.1	7.2	10.6	6.3	10.6	6.3	10.8	6.4
Coleman/Route 87 Ramps	11.1	6.5	11.3	6.7	10.1	5.9	10.2	6.0	10.3	6.0
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0

Source: MOC Physics Applied

◆ **Development of the project would not result in significant carbon monoxide impacts. (Less Than Significant Impact)**

Regional Impacts

Trips to and from the site associated with buildout of the project would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Regional emissions associated with project vehicle use have been calculated using the URBEMIS7 computer program. The URBEMIS7 program and the assumptions made in its use are described in the air quality analysis found in Appendix C.

The incremental daily emission increase associated with the land uses proposed on the project site is identified in Table 11 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM_{10}. The Bay Area Air Quality Management District has established a threshold of significance for ozone precursors and PM_{10} of 80 pounds per day. Proposed project emissions shown in Table 11 would exceed these thresholds of significance for all three pollutants, so the proposed project would have a significant effect on regional air quality.

◆ **Development of the project would result in a significant impact on regional air quality (Significant Impact)**

TABLE 11 PROJECT REGIONAL EMISSIONS (Lbs/Day)			
	Reactive Organic Gases	**Nitrogen Oxides**	**PM_{10}**
Proposed Project	275.6	408.6	182.6
BAAQMD Significance Threshold	80.0	80.0	80.0

Construction Impacts

Construction equipment would be a source of exhaust emissions during construction on the entire site. More importantly, during construction the potential for fugitive dust impacts would exist. Fugitive dust can be emitted by the action of equipment and vehicles and as a result of wind erosion over exposed earth surfaces. Clearing, grading and earthmoving activities comprise the major source of construction dust emissions, but traffic and general disturbance of the soil also generate significant dust emissions. In addition, demolition of existing buildings and pavement, and removing demolition debris from the site, will also generate dust.

Construction dust impacts are extremely variable, being dependent on wind speed, soil type, soil moisture, the type of construction activity and acreage affected by construction activity. A rough estimate of uncontrolled construction PM_{10} emissions is 0.77 tons per month per acre of active construction.[5]

The local effects of construction activities would include increased dustfall and locally elevated levels of PM-10 downwind of construction activity. Depending on the weather, soil conditions, the amount of activity taking place and nature of dust control efforts, these impacts could extend downwind from the site, affecting neighboring residential properties. This impact is considered to be potentially significant.

Concrete Crushing

The project proposes the use of a concrete crusher on site during site clearing and demolition. The use of a crusher would allow materials to be reduced in size prior to being trucked off site, resulting in fewer truck trips during construction. The crusher would most likely be located in the vicinity of Area 4, as shown on Figure 4. Concrete crushing would result in dust within the project area; however, the crusher would require a permit from the Bay Area Air Quality Management District (BAAQMD), as well as a permit from the City of San Jose. These permits would require measures to reduce dust emissions during use of the crusher. The use of a concrete crusher, as permitted by the BAAQMD is not expected to result in significant short-term air quality impacts.

[5]Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996.

Hazardous Materials Disturbance

Past activities on the site have led to soil and ground water contamination associated with the use and storage of hazardous materials. The activities have resulted in diesel fuel and solvent spills. Although remediation is ongoing, arsenic, manganese and (hexavalent) chromium could still be present in the soil. Construction activities such as demolition and grading will result in construction dust impacts as indicated above. Such disturbance of the soil could transport or disturb hazardous materials thus exposing construction workers or residents downwind of the site to hazardous materials contamination.

◆ **Construction activities related to redevelopment of the site would result in significant short-term air quality impacts. (Significant Impact)**

3. <u>Mitigation and Avoidance Measures for Air Quality Impacts</u>

The following mitigation measures are included in the project to avoid or reduce construction related air quality impacts to a less than significant level:

- At the time specific development is proposed, an Integrated Environmental Safety and Health Plan (IESHP) will be prepared for the construction phase of the project. The IESHP will provide: 1) a means for monitoring of hazardous substances in soils and in buildings that are to be demolished; 2) to assess and prioritize the risks associated with each potential hazard; 3) develop measures to minimize risk to workers and the public by controlling airborne emissions; 4) provide for coordination with the DTSC, BAAQMD, and other agencies as needed; and 5) control emissions of ordinary particulate matter or airborne dirt that would not be classified as "hazardous". Prior to construction, soils on site will be remediated per the site's DTSC order to ensure worker safety. This remediation will reduce safety risks for construction workers to a less than significant level.

- Any future development would be subject to the City's Grading Ordinance; all earth moving activities will include provisions to control fugitive dust, including regular watering of the ground surface, cleaning nearby streets, damp sweeping, and planting any areas left vacant for extensive periods of time.

- The use of a concrete crusher on site will require permits from the BAAQMD and the City of San Jose.

In addition, the following standard construction measures will be implemented to ensure dust is kept to a minimum:

- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, stockpiles, and staging areas at construction sites.

- Damp sweep daily if visible soil material is carried onto adjacent public streets.
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation as quickly as possible.

The use of watering alone for dust control is estimated to reduce dust emissions by about 50 percent. The combined effect of the above measures, including the use of a dust suppressant, would have a control efficiency of approximately 50 percent, which would be expected to reduce construction related impacts to a less than significant level.

Regional Air Quality Impacts

Implementation of the following mitigation measures, as well as the Transportation Demand Management (TDM) program described in the traffic section of this EIR will reduce regional air quality impacts:

- Use site planning to provide pedestrian/bicycle circulation and orient development toward transit opportunities.
- Provision of physical improvements, such as sidewalks, landscaping, the installation of bus shelters, bicycle parking, and the operation of a shuttle to the nearby transit center that would act as incentives for pedestrian, bicycle and transit modes of travel.
- Implement a vehicle-trip reduction program and provide employees with incentives to carpool and/or utilize transit.

The adoption of the above measures will have the potential to reduce the regional impacts of the project by approximately ten to 15 percent. While this will reduce air quality impacts it would not be sufficient to reduce the project's regional air quality impacts to a less than significant level.

***Conclusion*: With the implementation of the mitigation measures described above, short-term construction air quality impacts would be avoided or reduced to a less than significant level, however, the project would result in significant unavoidable regional air quality impacts. (Significant Unavoidable Impact)**

D. NOISE

The following discussion is based upon a noise analysis that was conducted for the project by *Illingworth and Rodkin, Inc., Noise Consultants* (November 1999). This analysis was updated in June 2002 to calculate the project's noise impacts using the assumptions included in the project traffic prepared by *Parson Transportation Group*. This updated noise analysis is presented in Appendix D of this EIR.

1. Existing Setting

Background Information

Noise intensity is customarily measured in "decibels" (dB), which is a numerical expression of sound levels on a logarithmic scale. A noise level that is ten dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. Sounds less than five dB are just barely audible, and then only in the absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) filters out some of the low and high pitches that are not as audible to the human ear. Thus, noise impact analyses commonly use the dBA.

For traffic noise, ten times as many vehicles per hour results in ten times as much sound energy, resulting in a ten-decibel increase, and a perceived doubling of loudness. Twice as many vehicles per hour mean twice the sound energy, resulting in a three-decibel increase, and a just-noticeable increase in loudness. Twenty-six percent more vehicles per hour means 26% more sound energy, resulting in a one-decibel increase, usually considered to be an imperceptible increase in loudness. The speed of traffic also affects noise levels: for every five mph increase in speed there is a one to two-decibel increase in average noise levels.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as Ldn, or CNEL.[6] Using one of these descriptors is a way for a location's overall noise exposure to be measured; realizing of course that there are specific moments when noise levels are higher (e.g., during lulls in traffic flows on Coleman Avenue or in the middle of the night). For this report, Ldn is used when referring to the noise standards of the City of San Jose, while CNEL is used in referring to the noise standards of the ALUC. However, in most cases, these terms can be used interchangeably.

Noise Policies and Regulations

The Noise Element of the City of San Jose's 2020 General Plan contains noise guidelines for various land uses within the City, and identifies acceptable noise exposure levels for those

[6] Ldn stands for Day-Night Level and is a 24-hour average of noise levels, with a ten-dB penalty applied to noise occurring between 10:00 pm and 7:00 pm) noise levels. CNEL stands for *Community Noise Equivalent Level;* it is a measure of the cumulative noise exposure in a community. It is essentially the same as Ldn except that there is an additional 5-dB penalty applied to noise occurring between 7:00 pm and 10:00 pm.

uses in terms of Ldn. An exterior level of 60 dBA Ldn is considered acceptable for commercial land uses (including office) and an exterior limit of 70 dBA Ldn is considered acceptable for heavy industrial uses. Noise levels exceeding 76 dB Ldn require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 dB Ldn.

The City's acceptable noise objectives recognize that the attainment of exterior noise quality levels in the environs of the NYMSJIA, the Downtown Core Area, and along major roadways may not be achieved in the time frame of the General Plan.

The Airport Land Use Commission (ALUC) defines noise in terms of CNEL. CNEL measurements are used to establish noise impact contours around public airports, including NYMSJIA. The contours take into account such things as the aircraft fleet mix, the number of operations, and the time of day operations occur. The CNEL contours are used to evaluate the compatibility of various types of land uses with the noise environment surrounding the airport.

The ALUC has adopted a Land Use Compatibility Chart for projects in the vicinity of NYMSJIA that provides a general overview of the types of land uses which are permissible in different noise environments. For example, commercial uses are compatible within the 60 to 65 CNEL. However, should these uses be proposed in locations where the CNEL due to aircraft noise ranges from 65 to 75 dBA (the southeastern portion of the site), the ALUC would require that noise insulation needs in these areas be reviewed carefully.

Noise Environment

The project site is located in an urban area and is, therefore, influenced by several surrounding noise sources. Noise sources that affect the baseline noise level of the area include:

- vehicle traffic on Coleman Avenue, a north/south street along the eastern boundary of the site;
- aircraft noise from the Norman Y. Mineta San Jose International Airport, adjacent to the site to the east;
- railroad noise from the Union Pacific Railroad tracks adjacent to the western boundary of the site.

Roadways

Coleman Avenue is a four to six-lane arterial, which is located along the eastern boundary of the site. Noise measurements were conducted 50 feet from the centerline of the near lane on Coleman Avenue, typical of the proposed building setbacks for the redevelopment plan. The measurement was conducted over a period of ten minutes and excluded aircraft noise. During the measurement, 409 vehicles passed on Coleman, of which four were heavy trucks. The average noise level was measured to be 66.5 dBA. Based on the distribution of noise levels over the course of a day measured at other locations on major thoroughfares in San Jose, the Ldn associated with traffic on Coleman Avenue would be 69 to 70 dBA at the measured setback.

Aircraft Overflights

Noise exposure information is developed for NYMSJIA operations by the City of San Jose on a quarterly basis based on a computer model which uses current airport operations data and continuously measured noise levels. According to the city, noise levels on the site due to aircraft noise exposure is expected to range (in the year 2006) from approximately 60 CNEL to 75 CNEL, as shown by the noise contours on the 2006 Aircraft Noise Exposure Map, Figure 15. The projected noise contours for the year 2010 show a reduction in aircraft-generated noise of about four dBA. During the noise measurements conducted for the project, typical maximum noise levels of jet aircraft landings and takeoffs ranged from 75 to 80 dBA at the measurement location.

Railroad Traffic

The Union Pacific Railroad tracks are located approximately 300 feet from the western site boundary. The closest set of tracks is used for switching operations. Based on noise measurements taken on the FMC site, train activity on the Union Pacific Railroad tracks does not appear to make a significant contribution to the overall noise environment on the project site.

2. Noise Impacts

Thresholds of Significance

For the purposes of this project, a noise impact is considered significant if the project will result in:

- exposure of persons to, or generation of, noise levels in excess of standards in the City's general plan, or applicable standards of other agencies; or
- exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels; or
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- expose people to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Aircraft Noise Impacts

As indicated previously, a maximum noise level of 75 dBA Ldn is expected to occur in the southeastern portion of the project site due to aircraft overflights. According to the San Jose General Plan, research and development uses would be compatible with an Ldn of up to 76 dB as long as the buildings are designed to maintain an interior noise environment of 45 dB or less. Outdoor activity areas should be restricted to areas on the site where the Ldn does not exceed 60 dB.

The Noise Element of the San Jose 2020 General Plan considers hotels to be compatible with an exterior noise environment of up to 60 dB without any mitigation for either interior or exterior noise levels. In a noise environment with an Ldn of between 60 and 76 dB, the

Noise Element requires that when new development requires an EIR, an acoustical analysis should be conducted indicating the amount of attenuation necessary to maintain an indoor level of less than or equal to 45dB.

As previously described, the ALUC may allow commercial uses in areas with a CNEL of up to 75 dB as long as noise insulation needs are carefully reviewed. Industrial uses may be allowed in areas with up to 80 dB with the same caveat. The ALUC discourages hotels and other residential uses in areas where the CNEL exceeds 65 dB. However, if these uses are related to airport service, they will be considered on a case-by-case basis and may be approved if appropriate interior noise levels are maintained.

- **In some locations, existing noise levels on the project site are above City standards for the proposed uses. Some occupants of individual R&D buildings may be exposed to interior noise levels above 45 dBA. Hotel uses or sensitive commercial uses may experience noise levels that exceed ALUC and General Plan noise standards. (Significant Impact)**

Noise Impacts on Existing Streets

Calculations were done to determine increases in noise levels along the streets serving the site. The increase in traffic volumes and the corresponding decrease in traffic speeds due to the decrease in the level of service in the area were considered in calculating noise level increases. In all cases, future noise level increases are expected to be less than three dBA greater than they are today. When compared to increases over projected background conditions, these increases are expected to be less than one dBA. These changes in traffic noise levels are not expected to be noticeable and future noise conditions in the area will not be significantly greater than they are today.

- **Future redevelopment of the site is not expected to result in significant traffic-related noise. (Less Than Significant Impact)**

Project Construction Noise

Construction activities related to redevelopment of the site including demolition of the existing facilities will create short-term noise. Construction equipment generates noise levels in the range of 70 to 90 dBA at a distance of 50 feet. The nearest residential structures are located approximately 150 feet from the southern boundary of the project site. Given the high ambient noise levels of the project area, construction and demolition activities in the southern portion of the project site are not expected to create a significant impact on these residences.

Concrete Crushing

The project proposes the use of a concrete crusher on site during site clearing and demolition. The use of a crusher would allow materials to be reduced in size prior to being trucked off site, resulting in fewer truck trips during construction. The crusher would most likely be located in the vicinity of Area 4, approximately 400 feet from the residential areas located to the south of Newhall Street. A concrete crusher is expected to produce noise in the range of 70 to 80 decibels at a distance of 50 feet. Noise levels decrease by six decibels for every doubling of distance of separation from such localized sources. Therefore, at a distance of 400 feet, noise from the crusher would be would be in the range of 52 to 62

decibels. Given the ambient noise levels in the project area and its proposed location at least 400 feet from sensitive receptors, the concrete crusher is not expected to result in significant short-term noise impacts to the nearby residential area.

◆ **Construction activities and demolition would not result in significant construction-related noise impacts to the adjacent residential structures located south of the site. (Less than Significant Impact)**

3. Mitigation and Avoidance Measures for Noise Impacts

The following mitigation measures are included in the project to avoid or reduce potentially significant noise impacts to a level of less than significant:

- New development proposed within the southeasterly corner of the site will adhere to the current requirements set forth in the ALUC Land Use Plan for development within the 65 CNEL of the NYMSJIA. The potential noise impacts associated with the project site's proximity to the NYMSJIA would be mitigated by compliance with the ALUC development restrictions.

- An acoustical consultant shall review the project plans including proposed building siting and will provide specific recommendations to ensure that interior noise levels of 45 dB are maintained for future occupants of the site. The mitigation measures shall be incorporated into the project to the satisfaction of the Director of Planning, Building, and Code Enforcement. Typical new office buildings with fixed windows provide a minimum of 30 dBA in noise reduction indoors. Other techniques to reduce noise impacts may include, but are not limited to, the following:

  - Maintain a minimum setback distance from all noise sources;
  - Design the site to provide maximum protection for outdoor use areas;
  - Provide noise attenuation in building construction which could include higher noise-rated windows, forced ventilation, insulation etc., to ensure that interior hotel and office spaces do not exceed 45 dB Ldn.
  - Restrict outdoor activities to areas on the site protected from environmental noise sources.

Mitigation for Construction Noise

- Advance written notification of planned construction activities will be provided to residents and sensitive land uses within 300 feet of the site, alerting them of construction activities, including the overall duration of the various construction phases. The notification will occur no later than 48 hours prior to the start of construction at a given location and will include information so residents can contact a construction monitor should they have questions or concerns. These concerns will be forwarded to the City for remediation, as necessary.
- A construction liaison will coordinate the timing of particularly noisy operations near the school and single-family residences to minimize conflicts with these sensitive land uses.
- Construction operations will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday within 500 feet of a residential unit, unless otherwise expressly allowed in the Development Permit or other planning approval for the project (Title 20, City of San Jose

Municipal Code). Pile driving, if necessary, will be limited to the hours of 8 a.m. to 5 p.m., Monday through Friday.

- Available noise suppression devices will be used. Using quiet or "new technology" equipment, particularly the quieting of exhaust noises, would reduce construction noise by use of improved mufflers. All internal combustion engines used at the project site would be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment would be maintained in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components.
- Staging of construction equipment and unnecessary idling of equipment will be avoided within 500 feet of noise-sensitive land uses to the extent possible.

Conclusion: **Implementation of the above listed mitigation measures, City ordinances, and ALUC guidelines, will ensure that potentially significant noise impacts resulting from the proposed development will be avoided or reduced to a less than significant level. (Less than Significant Impact with Mitigation Measures Included in the Project)**

E. GEOLOGY & SOILS

The following discussion of geologic and soils conditions in the project area is based upon the *Geotechnical Investigation of San Jose* (Cooper Clark, 1974) and the *Soils of Santa Clara County* (United States Department of Agriculture, Soil Conservation Service, 1968).

1. Existing Setting

Geology and Topography

The project site is located in the Santa Clara Valley, an alluvial basin bounded by the Santa Cruz Mountains to the southwest and west, the Mt. Hamilton Diablo Mountain Range to the east, and the San Francisco Bay to the north. Bedrock in this area is made up of the Franciscan Complex, a diverse group of igneous, sedimentary and metamorphic rocks of Upper Jurassic to Cretaceous age (70 to 140 million years old). These rocks are part of a northwesterly-trending belt of material that lies along the east side of the San Andreas Fault system. Overlaying the bedrock at substantial depths are marine and terrestrial sedimentary rocks of Tertiary and Quaternary age. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Mt. Hamilton-Diablo Range were exposed by continued tectonic uplift and regression of the inland sea that had previously inundated this area. Today the Guadalupe River and Coyote Creek are major drainages that continue to deposit sediments into the southern San Francisco Bay from the Santa Cruz Mountains and Mt. Hamilton-Diablo range respectively. The project site area is primarily flat. There are no significant topographical features that exist on the site.

Seismicity and Seismic Hazards

The project site is located within the seismically active San Francisco Bay region. The Uniform Building Code designates the entire South Bay as Seismic Activity Zone 4, the most seismically active zone in the United States. The major earthquake faults in the project area are the Hayward Fault and Calaveras Fault, located approximately 6.5 miles and 8.5 miles respectively to the east, and the San Andreas, approximately 14 miles to the west (refer to Figure 16). The faults in the region are capable of generating earthquakes of at least 7.0 in magnitude, therefore, it can be expected that earthquakes could produce very strong ground shaking at the subject site during the life of structures built there.

Liquefaction

Liquefaction results in the transformation of loose water-saturated soils from a solid state to a liquid state during groundshaking. Many elements influence the potential for liquefaction including the soil type, soil cohesion, and groundwater level. The potential for liquefaction on the site is considered moderately high (Cooper Clark). In addition, the site is within the State of California Seismic Hazard Zone for Liquefaction (California Department of Mines and Geology, now the California Geological Survey, 2002). The site is located in an area that has the potential for soil liquefaction, based on the depth to groundwater and presence of recent alluvial deposits. Sites located in these potential seismic hazard zones require site-specific investigation and evaluation following guidelines presented in CDMG Publication 117.

ponded runoff, and high inherent fertility characterize the soil on the project site. There is no erosion hazard and the site's shrink-swell potential is high (USDA).

2. Geology and Soils Impacts

Thresholds of Significance

For the purposes of this EIR, a geology and soils impact is considered significant if the project:

- is located on a site with geologic features which pose a substantial hazard to property and/ or human life (i.e., an active fault, active landslide etc.); or
- would expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety design techniques; or
- be located on expansive soil, as defined by the Uniform Building Code, that would create substantial risks to life or property; or
- expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic ground shaking, and seismic-related ground failure (including liquefaction, landslides, or expansive soil); or
- trigger or accelerate geologic processes such as landsliding or erosion; or
- cause displacements, compaction, exposure, or over covering of soil such that project development poses a reasonable probability of damage, endangerment, or other hazard to on- or off-site buildings or structures by ground or soil failure.

Soils

The project site is underlain by expansive soils, which may shrink or swell as a result of seasonal or man-made soil moisture content changes (USDA). Potentially expansive soil conditions could damage proposed structures and improvements on the site and represent a significant impact. Damage to structures and improvements from this soil hazard would be avoided or minimized through proper design, including the use of selected grading and deep building foundations.

Future development is not expected to be exposed to slope instability, erosion or landslide-related hazards due to the flat topography of the site.

Liquefaction

The project site is underlain by alluvial soils and the site is located within the Seismic Hazard Zone for Liquefaction, as previously described. Therefore, in the event of an earthquake, buildings and structures, if not adequately designed, could experience damage. Prior to project construction, geotechnical reports will be prepared for the site according to the guidelines in CDMG Publication 117. The project would be designed and constructed according to the Uniform Building Code guidelines for Seismic Zone 4 to avoid or minimize potential damage from liquefaction on the site.

Earthquake Fault Rupture

No active faults are known to cross the project site. Therefore, the potential for fault rupture is low.

Seismic Shaking

As indicated above, the project site is located in a seismically active region, and as such, strong ground shaking would be expected during the lifetime of any construction projects. Groundshaking on the site could damage buildings and other proposed structures and threaten occupants of the proposed development. All portions of the project would be designed and constructed in accordance with the Uniform Building Code guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site. Potential seismic impacts would be reduced to a less than significant level by the use of standard engineering techniques.

◆ **Future development on the site including buildings and infrastructure would be exposed to seismic hazards, including the potential for ground shaking, liquefaction, expansive soils, and vertical movement in the event of an earthquake. (Significant Impact)**

3. Mitigation and Avoidance Measures for Geology and Soils Impacts

The following mitigation measures are included in the project to avoid or reduce potentially significant geologic impacts to a level of less than significant:

- Geotechnical investigations for individual components of the project will be completed prior to the approval of building permits for specific buildings according to the guidelines in CDMG Publication 117. The buildings will be designed in conformance with the geotechnical reports' recommendations and the Uniform Building Code to reduce potential hazards. Potential measures could include the following:

  - Expansive soil conditions may be mitigated by placing non-expansive fill material beneath interior slab, on-grade floors and exterior concrete flatwork, relatively deeper footing depths, or alternative foundation types, and special drainage considerations.

- Seismic hazards to the proposed project will be mitigated by implementation of construction practices in accordance with Seismic Zone 4 building criteria described in the San Jose Building Code.

Conclusion: **Implementation of the above listed mitigation measures will avoid or reduce potential soils, geological, and seismic hazards to a less than significant level. (Less than Significant Impact with Mitigation Measures Included in the Project)**

F. HYDROLOGY/WATER QUALITY

1. Existing Setting

Hydrology and Flooding

There are no waterways present on the project site. The closest waterway to the site is the Guadalupe River located approximately one mile to the east. The project site overlies the Santa Clara Groundwater Basin, which has an aerial extent of approximately 240 square miles. The basin has a total storage of approximately three million acre-feet. Depth to groundwater varies seasonally, generally located five to seven feet below ground surface.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs), the majority of the site is located outside of the 100-year floodplain, in *Zone D* (Area of undetermined, but possible flood hazards). A very small sliver of the site (a portion of the landscaped area along Coleman Avenue) is located in *Zone AO* (areas of 100-year shallow flooding where depths are between one and three feet; average depths of inundation are shown, but no flood hazard factors are determined). However, a separate large-scale flood control project, sponsored by the U.S. Army Corps of Engineers, is currently underway on portions of the Guadalupe River, to the west of the site. Upon completion of the flood control project (December 31, 2004), it is expected that no portion of the project site will be within the 100-year floodplain. After the flood control project is complete, a Letter of Map Revision (LOMR) will be submitted to FEMA to change the FIRMs for the area.[7]

Storm Drainage Facilities

The City of San Jose maintains the storm drainage facilities in the project vicinity. The existing FMC developed site currently has a comprehensive on-site drainage system that ties into the existing drainage system within Coleman Avenue, which leaves the city street and heads easterly in a buried pipe through the airport property to an outfall at the Guadalupe River. The storm lines are most likely sized to accommodate the development currently located on the project site for the three-year storm. Additional improvements may be required to accommodate storm drainage for the 10-year event.[8]

Water Quality

The project site is located within the Guadalupe River drainage basin. The water quality of the Guadalupe River is directly affected by pollutants contained in stormwater runoff from a variety of urban and non-urban uses. Stormwater runoff from urban areas contains elevated levels of total suspended solids (TSS) and biochemical oxygen demand (BOD), as well as traces of heavy metals, pesticides, herbicides, oil and grease, asbestos, bacteria, and other contaminants. Existing stormwater runoff quality from the site is probably similar to that of typical urban runoff.

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[7] Steve Farranti, Santa Clara Valley Water District, personal communication, March 3, 2003.

[8] Gene Golobic, PE, Principal at Kier & Wright, Civil Engineers & Surveyors, personal communication, March 3, 2003.

Regulatory Setting

The project site is located within the watershed of the Guadalupe River, which drains to South San Francisco Bay and is within the jurisdiction of the San Francisco Bay Regional Board (RWQCB). The RWQCB has established beneficial uses for these two water bodies, which must be protected from pollution and nuisance as a result of water discharge. The RWQCB regulates waste discharges to protect these beneficial uses through the National Pollutant Discharge Elimination System (NPDES) Permit process. NPDES Permits typically establish Waste Discharge Requirements (WDRs), which include discharge prohibitions, effluent limitations, receiving water limitations, and other provisions intended to protect the beneficial uses of the receiving water body.

In 2001, the RWQCB reissued WDRs under the NPDES program for the discharge of stormwater runoff (NPDES Permit No. CAS0299718, Regional Board Order No. 01-024), through the implementation of the Storm Water Management Plans, which describes a framework for management of stormwater discharges.

Order No. 01-124 has been amended to include Provision C.3. concerning new and redevelopment performance standards to address post-construction impacts on stormwater quality. The performance standards for Provision C.3 are described in Appendix J of this EIR.

2. Hydrologic Impacts

Thresholds of Significance

For the purposes of this project, a hydrology and flooding impact is considered significant if the project will:

- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or –off-site; or
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted water; or
- place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or
- place structures which would impede or redirect flood flows; or
- degrade existing water resources beyond existing conditions or acceptable state water quality standards; or

- violate any water quality standards or waste discharge requirements; or
- expose people or structures to a significant risk of loss, injury, or death involving flooding; or
- expose people or structures to inundation by seiche, tsunami, or mudflow.

Hydrology and Flooding

Future development on the property is not expected to result in a significant increase in stormwater runoff from the site because the site is already developed and consists primarily of impervious surfaces. The discharge from the site is a function of the rainfall intensity, the runoff coefficients and the tributary drainage area. In the pre- and post- development conditions, the rainfall intensity and tributary drainage area will be the same. The variable will therefore be the runoff coefficients, which compares the pervious to impervious conditions. The pervious surfaces of the development that currently exists on the site were calculated as approximately 8.42 acres or 9% of the site. The proposed development would result in approximately 18.9 acres (or 20.4% of the site) of pervious surfaces, including three landscape features that are approximately 2.7 acres in size. Therefore, the post development discharge from the site is expected to be less than the existing rate of stormwater runoff from the site.

The project is required to comply with Provision C.3 of the City's NPDES Permit (No. CAS0299718). Under Provision C.3, no additional reduction in stormwater runoff volumes would be required. As proposed, development of the project site would reduce the amount of impervious surfaces; this would reduce the volume of stormwater runoff under post-development conditions, as compared to existing conditions. Further increases in the amount of stormwater to be infiltrated would not be recommended for the following reasons:

- Section i (iv) of Provision C.3 allows for minimizing the use of infiltration of stormwater if seasonal high groundwater levels are less than 10 feet below ground surface. At the project site, depth to groundwater is approximately 5 to 7 feet below ground surface; thus, additional use of infiltration devices (over and above the proposed impervious surfaces) would not be appropriate at the project site.
- The project site has been subject to contamination with hazardous materials as a result of historic industrial uses (please refer to Section H, Hazardous Materials). The site has undergone extensive testing; past environmental remediation efforts have cleaned up most of the site to acceptable levels, and on-going remediation will eventually result in an acceptably "clean" site. However, considering the historic presence of hazardous materials at the site, the extensive use of infiltration methods as a stormwater management technique would not be appropriate.

The project will be designed to conform to the City's Flood Hazard Ordinance and to comply with Federal Flood Insurance regulations. No structures are proposed within the 100-year floodplain. The site is not expected to experience substantial flooding during a 100-year storm event since only a very small portion of the site is within Zone AO of the 100-year floodplain and upon completion of the USACE project on the Guadalupe River, it is anticipated that no portion of the site will be within the 100-year floodplain. No adverse impacts to local groundwater resources would occur as a result of the proposed project, and no adverse effects from seiche, tsunami, or mudflow are anticipated.

- **Redevelopment of the site under the proposed project would potentially reduce stormwater runoff when compared to the existing conditions on the site. In addition, the proposed project would not result in the exposure of future occupants to significant flooding risks. (Less Than Significant Impact)**

Water Quality – Construction Activities

Implementation of the project would result in the demolition of the existing buildings, and redevelopment of the site with parking areas, buildings and infrastructure. Construction activities would result in extensive site grading and earthmoving, including the use of heavy equipment. This could potentially expose disturbed soils to the erosive forces of wind and rain, resulting in off-site deposition of sediments that could clog storm drains or adversely affect receiving waters, including the Guadalupe River. In addition, hazardous materials such as fuel, oil, paint, and solvents are routinely used during construction, and the accidental spill or release of these substances could adversely affect water quality. While construction activities would be temporary in nature, the potential impacts to water quality could last beyond the duration of construction, depending on the extent of degradation.

- **Construction activities, including grading and demolition, could result in adverse impacts to water quality. (Significant Impact)**

Water Quality – Stormwater Runoff

Implementation of the project would result in redevelopment of the site with parking areas, buildings and infrastructure. Such development would result in stormwater runoff from rooftops, parking lots, and other impermeable surfaces containing elevated pollutant loadings. Increased landscaping areas could also result in an incremental increase in surface water contamination if additional pesticides, herbicides or chemical fertilizers are introduced. Ongoing activities associated with the future build-out of the site could therefore contribute non-point source pollutant loadings, which could potentially result in adverse impacts to water quality in the stormwater system, the Guadalupe River, and South San Francisco Bay.

- **Stormwater runoff from the ongoing operations of the future development could contribute to a degradation of surface water quality. (Significant Impact)**

3. Mitigation and Avoidance Measures for Hydrologic Impacts

The following mitigation measures will be included in the project to conform to the current non-point source programs and to avoid or reduce hydrologic impacts to a less than significant level:

Construction Impacts to Water Quality

- The project will obtain and conform to the requirements of the General NPDES Construction Activity Stormwater Permit administered by the Regional Water Quality Control Board and the City of San Jose. The project grading plans will conform to the drainage and erosion control standards adopted by the City of San Jose and would be approved by the City Public Works Department. Prior to construction grading the

applicant will file a Notice of Intent (NOI) to comply with the General Permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) which addresses measures that will be included in the project to minimize and control construction and post-construction runoff. The SWPPP will be reviewed and approved by the City of San Jose Department of Environmental Services. The following measures would typically be included in the SWPPP:

- Eliminate or reduce non-stormwater discharges to the storm sewer system.

- Perform regular monitoring of discharges to the storm water system.

- Best Management Practices will include the following:
  - ✓ restricting grading to the dry season (April through October) if possible, otherwise using BMPs for wet season erosion control, including straw bales and/or silt fences, and storm drain inlet protection;
  - ✓ include use of stabilized construction entrances and/or wash racks;
  - ✓ damp street sweeping;
  - ✓ keeping adjacent streets free of dirt and mud during construction.
  - ✓ providing temporary cover of disturbed surfaces to help control erosion during construction; and
  - ✓ providing permanent cover to stabilize the disturbed surfaces after construction has been completed.

Long-Term Impacts to Stormwater Quality

The project shall comply with Provision C.3 of the City's NPDES Permit (No. CAS0299718). The project would be considered a "Group 1 Project" under Section c. of Provision C.3; as such, the proposed project would be required to design and implement stormwater treatment BMPs to reduce stormwater pollution to the maximum extent practicable. Provision C.3, Section d., Numeric Sizing Criteria, shall be used to size the stormwater quality control facilities.

A wide variety of stormwater management techniques are available to reduce the volume and improve the quality of runoff (BASMAA, 1999; WEF 1998). For this project, landscape methods would be the most appropriate because of the relatively large size of the overall project, the generally flat topography of the site, and the fact that all stormwater runoff is transported to a single storm drain pipeline, and subsequently routed to the Guadalupe River, which discharges to the San Francisco Bay. Landscape methods for stormwater quality control combine site engineering (grading and drainage) with landscape architecture. Landscape methods of stormwater quality control include extended detention (dry) ponds and wet ponds, and grass/vegetated swales, the latter of which is recommended for the project site.

Grass/vegetated swales are vegetated earthen channels that convey stormwater and remove pollutants, and can serve as an alternative to lined channels and pipes. When swales are not holding water, they appear as typical landscaped area. Pollutants and water are filtered by the grass and vegetation, and removed by infiltration into the soil. Through filtering through the vegetation and settling, swales provide good removal of suspended solids and the pollutants adsorbed onto the solids, including nutrients, heavy metals, and oil and grease. Dissolved constituents may also be removed through chemical or biological mechanisms

mediated by the vegetation and the soil. Some infiltration occurs through the underlying soil cover, but that is not the primary purpose or mode of treatment.

Swales require a minimum of approximately 1,200 square feet per acre of impermeable surface; thus, for the proposed project (which includes approximately 73.6 acres of impermeable surfaces), swales would occupy a minimum area of approximately 2.03 acres. Multiple swales would be necessary to treat all runoff from the site, but can include parking lot medians and perimeters of impervious pavements. The swales shall not be used to treat sediment-laden runoff from the active construction site (see above Measure for construction impacts).

It is recommended that all swales be designed and constructed to drain within 48 hours of a storm event in order to minimize the potential for vectors, including mosquitoes. To accomplish this design criterion, a fabricated soil bed shall be installed into the channel bottom. Soils would consist of a sand/soil mix to ensure permeability, with an underdrain system installed under the soil bed. The underdrain system is typically created by a gravel layer that encases a perforated pipe. Additional stormwater treatment is accomplished by this design, and the treated stormwater is then conveyed to the storm drain system.

Both grass swales and vegetated swales will be used, depending on the location. Grass swales are planted with turf grasses, and move water more quickly than vegetated swales, which are planted with bunch grasses or shrubs. Swales are typically designed as trapezoidal channels, while filter strips are typically designed with either v-shaped or parabolic cross-sections. Pollutant removal increases with increasing residence time of water in the swale. The optimum longitudinal slope is approximately 2% at the bottom of the swale; low slopes reduce public hazards, limit erosion, and increase pollutant removal. Side slopes should be 3:1 (horizontal: vertical) or shallower, to limit erosion and to improve maintainability.

Plant species should be selected that can survive periods of both inundation and drought. A variety of grass species, including native and non-native, can together produce a swale turf that is adapted to varying site environments. Both trees and shrubs can be located adjacent to swales, and on the banks of larger swales. Barrier shrubs may be used to reduce intrusion by people and domestic animals, but trees that shade the grasses should be avoided or spaced at least 20 feet apart. Supplemental irrigation may be necessary to keep turf grasses green year-round. Animal manure shall not be used as a soil amendment, and usage of fertilizers and pesticides shall be minimized.

The useful life of a vegetated swale system is directly proportional to its maintenance frequency. If properly designed and regularly maintained, vegetated swales can last indefinitely. Maintenance of grass swales includes mowing and removing clippings and litter; vegetated swales may require additional maintenance of plants to maintain a healthy vegetative cover. Sediment accumulation needs to be periodically removed at the top of banks, in the swale bed, or behind check dams. Monitoring for erosion will be required, especially after heavy runoff, with control measures taken as necessary; reseeding or replanting may also be required. The application fertilizers and pesticides should be kept to a minimum, with Integrated Pest Management (IPM) techniques implemented where feasible.

In addition, the project shall implement additional "Good Housekeeping" BMPs as appropriate, including the following:

- regular maintenance activities (*i.e.*, damp sweeping, cleaning storm water inlets, litter control, erosion control fencing) will be conducted at the site to prevent soil, grease, and litter from accumulating on the project site and contaminating surface runoff;
- all trash and recycling storage areas shall be covered; and
- stormwater catch basins shall be stenciled to discourage illegal dumping.

***Conclusion*: Implementation of the above listed mitigation measures will avoid or reduce hydrologic impacts from the future redevelopment of the site to a less than significant level. (Less than Significant Impact with Mitigation Measures Included in the Project)**

Mitigation Not Proposed as Part of the Project

As part of the Analysis of Stormwater Quality Control Options prepared for the project (Appendix J), several mitigation options were explored. These options included other landscape methods of stormwater quality control including the use of extended detention (dry) ponds and wet ponds. These options and a discussion of why they were determined to be inappropriate for the project site are described below. These options are therefore, not included as part of the proposed project.

Extended detention (dry) ponds store water during storms for a short period of time (from a few hours to a few days), and slowly discharge the stored water. These ponds are dry between storms, and do not have a permanent pool of water. Considering that the proposed redevelopment project would result in a reduction in stormwater runoff volumes from the project site, extended detention ponds are not considered necessary to mitigate peak runoff volumes.

Wet ponds are permanent pools of water that detain and treat stormwater runoff. They can be enhanced by designing a forebay to trap incoming debris and sediment, and by establishing a fringe wetland at the pond edge to increase pollutant removal and enhance the esthetic, economic, and habitat value of the pond. Surface area would be approximately 1% of the drainage area, or approximately one acre; volume would be sized to store 0.5" to 1.0" of runoff from the drainage area. While the site designers may desire such a permanent pool of water as an aesthetic landscape feature, this would likely result in higher capital and maintenance costs, as compared to grass/vegetated swales.

G. VEGETATION AND WILDLIFE

Classification and descriptions of biotic resources occurring on the site and in the project vicinity were made based upon previous studies conducted in May 1977 and November 1999 and updated Burrowing Owl surveys conducted in May 2000 and May 2002 on the site by *H.T. Harvey and Associates, Ecological Consultants.*

1. Existing Setting

Biotic Resources on the Project Site

The project site is located within an urbanized area. The entire 92.5-acre site is currently developed with industrial uses. Vegetation and wildlife habitat within and adjacent to the project site consists of developed and ruderal habitats. "*Natural Communities*" as described by Holland (1986) are not present within the project area.

Developed Habitat

Developed habitat on the site occupies approximately 85.5 acres. Buildings and pavement cover most of the developed habitat on the site. Landscaping is present adjacent to buildings and parking lots on the site. Planted tree species include Southern magnolia (*Magnolia grandiflora*), ash (*Fraxinus* sp.), redwood (*Sequoia sempervirens),* eucalyptus (*Eucalyptus* sp.), Italian stone pine (*Pinus pinea*), fan palm (*Washingtonia* sp.), and non-native oak (*Quercus* sp.). There are also five native oaks. Relatively recent plantings of Italian cypress (*Cupressus sempervirens*) ring a portion of the test track area. Shrubs and ground cover present on the site include pittosporum, oleander, coyote brush, boxwood, bottlebrush, St. John's wort, and ivy. Turfgrass is present in small areas in front of buildings.

The developed, landscaped habitat within the project site supports wildlife species typically associated with disturbed or urban areas. Wildlife observed or expected to occur on this portion of the site include mourning dove (*Zenaida macroura*), Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), American robin (*Turdus migratorius*), Western fence lizard (*Scelopourus occidentalis*), Botta's pocket gopher (*Thomomys bottae*), black-tailed jack rabbit (lepus californicus) and house mouse (*Mus musculus*).

Ruderal Habitat

Patches of ruderal habitat border the test track area in the western portion of the project site. The ruderal habitat on the project site occupies approximately seven acres of the site and supports species common to former agricultural fields and vacant urban lots. Ruderal habitats are areas that have been cultivated or otherwise heavily disturbed. They are generally characterized by a dense cover of herbaceous, or non-woody, species. Non-woody species noted on the site includes wild oat (*Avena fatua*,) farmer's foxtail (*Bromus murinum* ssp. *leporinum*), filaree (*Erodium* sp.), cheeseweed (*Malva parviflora*), and prickly lettuce (*Lactuca serriola*).

Special Status Plants and Animals

Special status plant and animal species include Federal and State of California listed threatened and endangered species, federal and state proposed or candidate threatened or endangered species, State of California fully protected species, and species that may be considered endangered or rare under Section 15380(d) of the California Environmental Quality Act (CEQA).

Special-status plant and animal species, their status and potential occurrence within the project site are listed in Appendix E. Information regarding special status species in the project area was obtained from several sources including records in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik, 1994).

Special Status Plant Species

Special-status plant species reported in the San Jose area are found in natural communities associated with serpentine grasslands and valley foothill grasslands. These natural communities are not found on the project site. No special status plants or potential suitable habitat for these species were observed on the developed project site.

Special Status Animal Species

Several special-status animals have been identified as historically or currently occurring in the vicinity of the project. The majority of special-status animal species occurring in the South Bay area breed and forage in habitat types that are not present within or adjacent to the project site. Habitats absent from the site include freshwater marsh, fresh water ponds with emergent vegetation, salt marsh, and serpentine soils. The project site does not provide suitable habitat for vernal pool tadpole shrimp, California red-legged frog, California tiger salamander, or the California clapper rail.

Several special status birds may occasionally forage on the ruderal areas of the site, but not breed on it. These include the Northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperi*), and white-tailed kite (*Elanus caeruleus).* No suitable habitat exists to support resident or breeding populations of the remaining species.

Burrowing Owls

The Burrowing Owl is a California Species of Special Concern. Nesting owls are protected under the Migratory Bird Treaty Act and the State of California Fish and Game Code. The Burrowing Owl is a small, terrestrial owl that occurs in annual and perennial grasslands, deserts, and scrublands with low-growing vegetation. Suitable owl habitat may also include trees and shrubs if the canopy does not cover more than 30% of the ground surface. Burrows, which provide protection, shelter, and nests for Burrowing Owls, represent an essential component of this species' habitat. Burrowing Owls typically use burrows made by ground squirrels or man-made structures such as culverts, or openings beneath cement, asphalt paving, or debris piles. Burrowing Owls use such sites for breeding, wintering, foraging, and migration stopovers.

Surveys for Burrowing Owls were conducted on the site in May 1997, November 1999, May 2000, and May 2002 by H.T. Harvey and Associates (Appendix E). Supplemental information was provided for those reports by Patricia Mosley, an ornithologist at *Natural Resources Management*, which has been incorporated into the H.T. Harvey surveys. During these surveys the area of the site near the test track, where owls are known to nest, was inspected for owls, potential nesting burrows, and secondary evidence of their presence (e.g., feathers, droppings, prey remains, and cast pellets). Three pairs of owls were observed on the site in 1997, two pairs in both 1998 and 1999, and one pair in 2000. Surveys were not conducted in 2001. During the protocol level survey conducted over three days in May 2002, no Burrowing Owls or signs of their presence (feathers, castings, prey remnants) were observed.

The site supports approximately seven acres of noncontiguous (not all in one piece of vacant ground) burrowing owl habitat, as shown on Figure 17. This habitat includes the area around the test track, a grassy area to the south of the track, and the parking area located to the northeast of the track. Habitat is present on the site in the narrow medians and landscaped areas surrounding the parking area.

Ordinance Size Trees

The City of San Jose Tree Removal Controls (San Jose Civil Code, Sections 13.31.010 to 13.32.100) are intended to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. The ordinance protects both native and non-native species. A tree removal permit is required from the City for the removal of ordinance-sized trees. In addition, any tree found by the City Council to have special significance can be designated as a Heritage Tree, regardless of tree size or species. No trees on site are currently listed as Heritage Trees.

A tree survey was conducted on the project site in May 2000 (Appendix G). The survey identified all trees that have a diameter equal to or greater than 54 inches at two feet above the existing grade, although the city standard is 56 inches. Therefore, four trees shown on Figure 18 (#210, 226, 283, and 331) are not ordinance size. Approximately 401 mature trees are present on the site, primarily around buildings and parking areas, with approximately 127 of them being of ordinance size, as shown in the table beginning on page 6 of Appendix G.

Planted tree species include species such as stone pine, magnolia, shamel and raywood ash, Italian cypress, olive, glossy privet, coast redwood, holly oak, tulip tree, black locust, peppermint eucalyptus, hopseed, and cherry. Five, large native coast live oaks, ranging from 29 to 54 inches in diameter are present in the eastern portion of the site (numbers 339, 340, 380, 386, and 387). Approximately 74 Italian cypress were recently planted near the test track area in the northeastern portion of the site.

Regulated Habitats

Areas meeting the regulatory definition of “Waters of the United States” (jurisdictional waters) are subject to regulatory review by the U.S. Army Corps of Engineers (USACE). The USACE, under provisions of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, has jurisdiction over “Waters of the U.S.”. These waters can include rivers, streams, lakes, ponds, and wetlands.

Areas not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions. The pond located on the site is made of concrete and does not meet the definition of jurisdictional wetlands or Waters of the U.S. Therefore, the pond would not be subject to review by the USACE. The pond also is not subject to California Department of Fish and Game jurisdiction either, for no natural habitats are found within the area.

2. Impacts to Biological Resources

Thresholds of Significance

For the purposes of this project, impacts to vegetation and wildlife are considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations; or
- have a substantial adverse effect on any wetland habitat or other sensitive natural community identified in local or regional plans, policies, or regulations; or
- have a substantial adverse effect on waters of the United States as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- substantially reduce the habitat of a fish or wildlife species, including causing a fish or wildlife population to drop below self-sustaining levels or threatening to eliminate an animal community; or
- reduce the number or restrict the range of a rare or an endangered plant or animal.

Impacts to Developed and Ruderal Habitats

Buildout of the proposed project would directly impact the vegetation and wildlife habitat of the project site. Direct impacts include replacement of approximately 85.5 acres of developed and seven acres of ruderal areas with 92.5 acres of new buildings, paved areas, and new landscaping. Species currently adapted to urban habitats, such as the Mourning Dove, Starling, and American Robin, would likely continue to use the project site. While these trees do not represent a protected habitat, their loss will incrementally reduce the habitat available to urban species. Impacts to the developed and ruderal habitats on the site are not considered a significant impact since these habitats are not considered sensitive habitats and are relatively abundant in San Jose. The five ordinance size coast live oak trees will be retained on-site. The remainder of the mature trees will either be removed or relocated on-site. The significance of impacts to ruderal habitat occupied by Burrowing Owls is discussed below under Impacts to Special Status Plants and Animals.

◆ **Redevelopment of the project site would not result in significant impacts to developed or ruderal habitats. (Less Than Significant Impact)**

Impacts to Special Status Plant and Animal Species

Development of the project site would not constitute a significant impact to the habitat of any listed threatened or endangered plant species. Burrowing Owls, which are listed by the State of California as a Species of Special Concern, are known to nest on a portion of the site.

Burrowing Owls

Impacts to On Site Population

As stated previously, surveys specifically for Burrowing Owls were conducted over the last several years, including one during the recent breeding season (May 2002). Two pairs of owls were observed on the site in 1999, as well as evidence of successful breeding, including the presence of fledglings.[9] Therefore, if Burrowing Owls are present on site at the time of construction, then construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The destruction of occupied Burrowing Owl burrows could also result in the destruction of individual birds. Any loss of Burrowing Owls or fertile eggs, any activities resulting in nest abandonment, or the destruction of occupied Burrowing Owl burrows would constitute a significant impact.

- **Construction activities associated with the proposed project could result in the loss of Burrowing Owls, their young, and/or fertile eggs. (Significant Impact)**

Loss of Burrowing Owl Habitat

The site contains approximately seven acres of noncontiguous ruderal/disturbed grassland habitat. This habitat is surrounded by urban development and is highly disturbed. Although habitat is marginal on the site, one pair of owls has been observed on the site within the last three years. The project site is part of a larger complex of occupied owl habitat that includes the Norman Y. Mineta San Jose International Airport, located to the east of the site.

The loss of occupied Burrowing Owl habitat, or habitat such as the project site, that is known to have been occupied by owls during the nesting season within the past three years, is considered a significant impact.

- **Redevelopment of the project site will result in the loss of approximately seven acres of Burrowing Owl nesting and foraging habitat. (Significant Impact)**

Impacts to Mature Trees

Ordinance size trees are defined by the City of San Jose as trees having a trunk measuring 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. Based upon the recently completed tree survey, approximately 127 ordinance size trees could be removed during site development. Many of the ordinance size trees are planted along landscape berms adjacent to Coleman Avenue and Newhall Street. These trees include stone pine, hawthorn, magnolias, and shamel ash. Interior trees include such species as coast redwood, peppermint eucalyptus, Italian cypress, and black locust.

[9] Patricia Mosley, ornithologist, Natural Resources Management, May 2000.

Of particular concern are five native oak trees of substantial size, which range from 88 inches to 130 inches in circumference. Oaks are declining in California due to urban development and management practices that have led to low tree regeneration. Although most oak species are not in danger of eradication at the present time, overall population losses have caused an increase in concern for the genus in California. Although not currently listed on the City's Heritage Tree List, other large oak trees of similar size within the City are listed on the Heritage Tree List. As part of the proposed project, the oak trees on the site would be retained either at their current locations or if the trees cannot be preserved in their current location, they may be transplanted to other locations on the site. For this reason, impacts to ordinance size oak trees would be less than significant.

During redevelopment of the site, healthy, mature trees would be incorporated into landscaping plans to the greatest extent feasible. If the trees cannot be preserved in their present location, transplanting the trees in other locations on the site would be explored. However, if it not possible to retain or relocate these trees, their loss would be a significant impact. In addition, for any trees to be retained on site, the health of mature trees can be impacted by construction activities such as grading and trenching. Changes in grade and drainage and direct impacts to tree roots could adversely impact these trees.

◆ **While the proposed project would incorporate as many existing trees into the project design as possible and the transplanting of trees to other locations on the site would be explored, removal of up to 127 ordinance size trees on the project site would constitute a significant impact. (Significant Impact)**

3. Mitigation and Avoidance Measures for Biological Impacts

The following mitigation measures are included in the project to avoid or reduce potentially significant biological impacts to a level of less than significant:

Measures to Avoid Impacts to Individual Burrowing Owls

The following measures are proposed as part of the project to avoid disturbance of individual Burrowing Owls during nesting and breeding on the project site, and to preclude the destruction of individual birds:

- In conformance with Federal and State regulations regarding the protection of raptors, a preconstruction survey will be completed in conformance with appropriate protocols, by a qualified ornithologist, no more than 30 days prior to the start of construction. If no Burrowing Owls are located during these surveys, then no additional action would be warranted. However, if breeding or resident owls are located on or immediately adjacent to the site, the following mitigation measures will be implemented by a qualified ornithologist:

    - No Burrowing Owls will be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG.

- A 250-foot buffer, within which no new activity will be permissible, will be maintained between project activities and nesting Burrowing Owls. This protected area will remain in effect until August 31 or at the CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.

- If accidental take (disturbance, injury, or death) of owls occurs, the CDFG will be notified immediately.

Measures for the Loss of Burrowing Owl Habitat

Burrowing Owls are known for high nest site fidelity in traditionally occupied nesting territories, which contributes to long term occupancy of nesting habitats by local owl populations. H.T. Harvey and Associates notes that while providing replacement habitat near project impact sites can succeed in retaining nesting owls in some instances; this retained site use may simply be by virtue of past nesting success by owls from that site. Success of replacement habitat may depend on the retained site familiarity and resultant tenacity of the individuals involved, but this replacement habitat may fail to provide nesting opportunities for Burrowing Owls lacking prior nesting experience on the site. In addition, there is a risk that providing habitat on smaller, isolated local habitat preserves may not provide long-term viability since they only fulfill their intended purpose during the reproductive lifetime of the owls originally affected, but may not provide sustained habitats of use to the local and regional population of Burrowing Owls.

If the project is developed as proposed, approximately seven acres of Burrowing Owl habitat will be lost. Mitigation for the loss of this existing habitat would need to be whatever actions could result in the same or an equivalent amount of habitat being available to the existing population of birds after the project is built. Ideally, this would involve modifying other land to make it suitable for use by Burrowing Owls. Unless such a mitigation site has been used by owls in the past, or is immediately adjacent to occupied habitat, there is, however, little assurance that the mitigation habitat will actually be occupied by the impacted population.

The California Department of Fish and Game (CDFG) has also defined mitigation to include protection of occupied habitat. The use of such a definition in Santa Clara County would, however, only result in a continued conversion of occupied habitat. For example, if the project were required to "acquire and preserve" a seven acre piece of property elsewhere in the area which is also occupied by Burrowing Owl habitat, the overall result of that "mitigation" would be to reduce the available habitat by seven acres. The resulting condition would be to preserve a small piece of Burrowing Owl habitat in the midst of an urban area; the habitat might or might not sustain the existing occupants of that site and the birds on the project site for the immediate future.

Mature Trees

- During redevelopment of the site, healthy, mature trees shall be incorporated into landscaping plans to the greatest extent feasible and transplanting of these trees at other locations on the project site will be explored. The five, large coast live oaks on the site will be retained. If the oak trees cannot be preserved in their present location, they will be transplanted in other locations on the site.

- For trees that cannot be incorporated into new landscaping, a City of San Jose Tree Removal Permit will be obtained prior to removal of trees from the site. Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose landscaping guidelines and City of San Jose Planning Department specifications. Tree replacement ratios as required by the City of San Jose, are shown below in Table 12.

TABLE 12
TREE REPLACEMENT RATIOS

Diameter (inches)	Replacement Ratio	Replacement Tree Size
18" or greater	4:1	24-inch box
12"-17"	2:1	24-inch box
Less than 12"	1:1	15-gallon

- In order to avoid impacts to mature trees to be retained by the project, a certified arborist will perform a tree survey to accurately identify the location and condition of trees that require protection from impacts due to grade changes, compaction, trenching or changes in water regime (irrigation). Tree protection measures, including installation of temporary construction fencing or barricades, root pruning of exposed roots, and on-site inspections by the arborist during construction, will reduce impacts to mature trees.

Conclusion: With the implementation of the mitigation measures described above, the proposed project would not result in significant impacts associated with the disturbance of individual Burrowing Owls during the breeding season. (Less than Significant Impact with Mitigation Measures Included in the Project) The implementation of the mitigation measures listed above will reduce the impact from the loss of ordinance size trees to a less than significant level. (Less than Significant Impact with Mitigation Included in the Project) The proposed project would result in a significant loss of Burrowing Owl nesting and foraging habitat. (Significant Unavoidable Impact)

Mitigation Measures not Proposed by the Project
For the Loss of Burrowing Owl Habitat

Providing Replacement Habitat within the Project Area

In order to provide replacement habitat with a reasonable chance of serving the local population of Burrowing Owls, this habitat should be located either adjacent to or within one mile of the project site. Therefore, other replacement habitat sites were considered, as discussed below.

The only adjacent vacant site is the Union Pacific Railroad site located to the west of the project site. While this site is large enough (21 acres), its location adjacent to the Union Pacific Railroad tracks, and its highly disturbed condition would make it undesirable as Burrowing Owl habitat.

The Norman Y. Mineta San Jose International Airport Approach Zone located southeast of Interstate 880, and north of Taylor Street, between Coleman Avenue and the Guadalupe River was cleared of homes in the 1980s, under orders by the FAA, in order to improve safety conditions for the airport approach. While this area is not located adjacent to the project site, it is located within one mile. According to the Guadalupe Gardens Master Plan Initial Study (March 2002), the suitability of the vacant land in this area as owl habitat is limited. Numerous trees are present at various locations which are suitable for use by raptors that prey on owls. Much of the area was surveyed by biologists in June and July of 2001 and no Burrowing Owls were observed, although a limited number of ground squirrel burrows were present. The last known siting of an owl within the Guadalupe Gardens was approximately eight years ago.

The use of the area north of West Hedding Street for Burrowing Owl Habitat is identified as a possible option in the Guadalupe Garden Master Plan (Phase 2). Therefore, while this area is not currently considered to be habitat, there is a potential that it could be managed as such. The project applicant could acquire 6.5 of the approximately 20 acres of the area north of West Hedding Street to be managed as habitat. Trees could be removed and the area could be fenced to protect future owls. However, it is not known if owls would occupy the area after it is set aside for owls. The securing of 6.5 acres (according to the CDFG as the number of acres required to support one pair of Burrowing Owls) of this property for Burrowing Owl habitat, in perpetuity, would not guarantee that owls would colonize on the site. For this reason, this alternative could reduce the impacts of the loss of Burrowing Owl habitat on the project site, but not to a less than significant level.

Preservation of Habitat on Site

The preservation of habitat on site is a possible mitigation measure. While the existing seven acres of habitat on site is noncontiguous, it could be consolidated into a habitat preservation area, in which no development would occur. Implementation of this measure would reduce the significant impact associated with the loss of Burrowing Owl habitat to a less than significant level.

CDFG Mitigation Agreement

Another potential mitigation measure not proposed as part of the project would be for the applicant to enter into a Mitigation Agreement with the CDFG. This agreement would provide that the applicant acquire and preserve existing Burrowing Owl foraging and breeding habitat management (HM) lands in an amount found to be necessary to sustain one pair of owls, based upon 6.5 acres per pair.

As part of this agreement, the project applicant would provide the CDFG with security in the form of funds which would be used to:

- Allow for the acquisition and/or preservation of HM lands, at an unspecified location;

- Provide initial protection and enhancement activities on the HM lands, to include but not limited to, measures such as fencing, trash clean-up, artificial burrow creation, grazing or mowing, and any habitat restoration deemed necessary by the CDFG;

- Establish an endowment for the long-term management of the HM lands; and

- Reimburse the CDFG for reasonable expenses incurred as a result of the approval and implementation of this agreement.

This agreement would not require that the replacement habitat be at a location that would serve the local population and it would probably not be in Santa Clara County. While this measure might contribute to the long-term survival of Burrowing Owls regionally, it would not mitigate impacts to the local population. The impact on Burrowing Owl habitat that sustains the local population would still be significant with the implementation of this mitigation measure. Therefore, it is not proposed as part of the project.

Conclusion: The only mitigation that would avoid or reduce impacts associated with the loss of Burrowing Owl habitat on the site is the preservation of habitat on the project site itself. This mitigation is not proposed as part of the project. Therefore, the project would result in a significant unmitigated impact due to the loss of Burrowing Owl nesting and foraging habitat. (Significant Unmitigated Impact)

H. HAZARDOUS MATERIALS

The following discussion is based on information provided in a record search by Environmental Data Resources (previously, *Vista Information Solutions) in May 1997* and by personal communication with FMC personnel regarding the status of the site. Letter reports were prepared for the site by *Malcolm Pirnie* in February 2000 and May 2002 to provide updated information regarding the remediation currently in progress on the project site. These letter reports are contained in Appendix F of this EIR.

1. Existing Setting

Hazardous materials are commonly used by large institutions, commercial and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, cleaners, paint, and solvents. Due to its chemical and physical properties, a substance may be considered hazardous if it poses a substantial hazard to human health or the environment. Substances can present a potential hazard when they are improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

Past use of the site by FMC for the manufacturing of military vehicles included the use of hazardous materials. In the course of manufacturing, storing, maintaining, and repairing vehicles, FMC generated hazardous wastes, and has managed hazardous wastes on the site.

Existing Contamination

Past hazardous material management practices have led to soil and groundwater contamination at properties in the vicinity in San Jose, and throughout Santa Clara County. Many of the contaminated sites have been caused by leaking underground fuel storage tanks. Several governmental agencies are responsible for overseeing cleanup depending on the source and level of contamination identified onsite. Regulations are in place that deal with responsibilities of clean up. Contaminated sites are identified on various Federal, state and local lists. A summary of several of the databases is provided below:

National Priorities List (NPL)

Sites are scored and listed based on their potential threat to human health and the environment. Those sites with the greatest concerns listed are on the NPL and are commonly referred to as “Superfund sites”. The EPA is responsible for maintaining the database of hazardous waste sites identified for priority remedial actions under the Superfund Program. Sites on the NPL must be cleaned up in accordance with Federal regulations and are eligible for Superfund monies for investigation and cleanup.

CERCLIS List

The CERCLIS list is a compilation of sites which may have had a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund Act).

Emergency Response Notification System (ERNS)

The ERNS is a national database used to collect information on reported accidental releases of oil and hazardous substances. The database contains information from spill reports made to Federal authorities including the EPA, U.S. Coast Guard, the National Response Center and the Department of Transportation.

State Priority List (SPL)

The California Environmental Protection Agency (Cal EPA) Department of Toxic Substances Control (DTSC) maintains an inventory of facilities subject to investigation concerning likely or threatened releases of hazardous substances. Sites on the inventory are required to prepare Work Plans.

Leaking Underground Storage Tanks (LUST) Information Systems

A leaking underground storage tank information system is maintained by the Cal EPA. Sites with known underground storage tank leaks are tracked by this system.

Offsite Constraints

A Site Assessment Report was prepared for the project vicinity by *VISTA Information Services*, and is on file at the City of San Jose's Department of Planning, Building and Code Enforcement. The report identified numerous facilities in the vicinity of the site that use hazardous materials, or have known contamination. The vast majority of firms on the list utilize and/or store hazardous materials but have not necessarily experienced any releases.

Several properties in the vicinity of the project site have experienced soil and/or groundwater contamination. Most of the sites with contamination are related to leaking underground fuel storage tanks. It is not expected that these sites would affect any future uses on the project site, as all are located downgradient of the project site.

Onsite Constraints

According to a Vista search, the FMC site is listed on the CERCLIS, SPL, Cortese (State index of properties with hazardous waste), RCRA, ERNS, LUST, and as a generator of hazardous wastes.

Investigation and remedial activities are currently ongoing under the RCRA Corrective Action Consent Agreement with the Cal EPA DTSC effective as of January 2, 1996, which covers the entire project site. Investigation workplans are continuing to be developed and implemented to delineate the lateral and vertical extent of the chemically impacted soil and groundwater. On-going investigative results have been provided to DTSC. The following provides a general description of known hazardous materials concerns on the site, by area.

Plant 7 Area

The approximately 29-acre southern portion of the site referred to as "Plant 7" includes 1095 Stockton Avenue, and 1105, 1107 and 1115 Coleman Avenue. Based on site investigations,

waste oil, hydrocarbons, heavy metals and solvents were detected in the soil and groundwater. A Health Risk Ecological Assessment[10] was performed that determined that the levels of contaminants were below regulatory action levels and DTSC approved the Plant No. 7 RCRA Facility Investigation Report. Therefore, no further action is required for the Plant 7 area, which is why this area is not shown on Figure 19. According to the Risk-based evaluation of potential human and ecological impacts, this area does not pose a health risk to humans or the environment and therefore, does not require clean up for the current or expected future industrial or commercial activities. A deed restriction was filed with the County Assessor's Office to limit the Plant 7 area to industrial and/or commercial activities.

Test Track Area

In 1997, investigation activities were initiated in the 46-acre Test Track Area in the northern portion of the site by *URS Greiner Woodward Clyde*. The project was transferred to *Malcolm Pirnie* in early 2000. In accordance with the DTSC-approved investigation work plan, soil and groundwater samples were collected throughout the Test Track Area where industrial activities took place, as well as in other areas. All samples were submitted to State of California-certified chemical laboratories for analysis.

The soil and groundwater samples collected were typically analyzed for solvents, heavy metals, and petroleum hydrocarbons. Based on the analytical results, additional samples were collected to further delineate the extent of facility-related chemicals present in soil and groundwater. Groundwater monitoring wells have been installed in the Test Track Area to allow measurements of the depth to groundwater (Figure 19) and the collection of samples for chemical analysis.

In the fall of 1999, FMC managed the remediation of soil in the Test Track Area, following DTSC's approval of a remediation work plan. Solvent-impacted soil in the northern portion of the area was excavated and aerated at the facility. Aided by tilling, the solvents in the soil volatilized over a period of several weeks. After the volatilization process was complete, the soil was returned to the excavated area and compacted. The area was then repaved.

In the central portion of the Test Track Area, soil impacted by heavy metals above the regulatory action levels was excavated. Excavated soil was removed from the facility and properly disposed of at State of California-permitted landfills. This work was completed by February 2000.

A groundwater extraction and treatment system was constructed in the northern portion of the Test Track Area, in June 2000 and operation began in September 2000. The treatment system has been removing and treating solvent-impacted groundwater at the northern or downgradient property boundary of the Test Track Area. No groundwater treatment is necessary elsewhere in the Test Track Area.

On October 15, 2001, FMC submitted the Test Track Area RCRA Facility Investigation (RFI) Report to DTSC. In a letter to FMC dated October 23, 2001, DTSC approved the RFI report. On October 29, 2001, FMC submitted the Test Track Area corrective measures Study (CMS) Report to DTSC. In the CMS report, FMC concluded that interim remedial measures taken for soil were successful in achieving regulatory action levels. As such, FMC

[10] On file with the Department of Toxic Substances Control, 700 Heinz Avenue, Suite 200 Berkeley, CA.

recommended that no further remedial action for soil was warranted. For groundwater, FMC recommended that operation of the existing groundwater extraction and treatment system in the north Test Track Area be continued in conjunction with regular groundwater monitoring both onsite and on City property across Coleman Avenue from the Test Track Area. DTSC issued a Fact Sheet in November 2001 with respect to selection of a final remedy for the Test Track Area. In a letter dated December 18, 2001, DTSC approved these recommendations as the final RCRA corrective action remedy for the Test Track Area. In a letter dated May 24, 2002, DTSC confirmed its approval of the Corrective Measures Study and final remedy.

On March 15, 2002 FMC submitted the Corrective Measures Implementation (CMI) Report. The purpose of the CMI Report is to describe the operation, maintenance, and monitoring of the groundwater extraction and treatment system operating in the north Test Track Area. As such, FMC submitted an Operation and Maintenance Plan that describes how the system will be operated and maintained, and how the groundwater monitoring results will be used. On November 18, 2002, DTSC approved the CMI report.

A deed restriction was filed with the County Assessor's Office to limit the Test Track Area to commercial, industrial, research and development, and office purposes only.

Central Plant Area

Initial investigations of the 25-acre Central Plant Area (central portion of the site between the Plant 7 and Test Track areas) were performed in 1997, with URS Greiner Woodward Clyde as the consultant. In early 2000, the project was transitioned to Malcolm Pirnie. In accordance with the DTSC-approved investigation work plan, soil and groundwater samples were collected throughout the Central Plant Area, both in areas where industrial activities took place as well as in other areas. All samples were submitted to State of California-certified chemical laboratories for analysis. Following DTSC's approval of the interim measures work plan, FMC excavated and disposed of total petroleum hydrocarbon and metal-impacted soil from the Central Plant Area during the summer and fall of 2000, as well as in the fall of 2001. Soils were disposed off-site at a California-permitted landfill.

Numerous groundwater monitoring wells have been installed in the Central Plant Area to allow collection of groundwater samples and measurements of the depth to groundwater (Figure 19). A dual-phase (groundwater and soil vapor) extraction and treatment system was constructed in the Central Plant area between August 2000 and January 2001 as an interim measure to remediate solvent-impacted shallow soil and groundwater. The system started operation in February 2001 and was shut down for further evaluation.

A groundwater extraction and treatment system was installed as an interim measure at the northern property boundary of the Central Plant Area between October 2001 and February 2002, and started operation in March 2002. The system is removing and treating solvent-impacted groundwater at the northern or downgradient property boundary of the Central Plant Area.

Asbestos/Lead-based Paint

The site was developed during an era (1950's-1960's) when the use of asbestos in building material and lead-based paint was common. Some of the buildings contain lead-based paint and asbestos. Both asbestos and lead cause human health problems. The presence of lead in

surface paint, and asbestos commonly found in floor tiles, building material, and insulation, are potential human health hazards, especially during demolition activities when workers could be exposed to lead and asbestos particulates.

In addition, other hazardous materials have been identified; light ballasts contain polychlorinated biphenyls (PCBs), light tubes contain mercury, and chlorofluorocarbons (CFCs) are present in heating, ventilation and air conditioning units. All three substances are hazardous to humans and/or the environment.

2. Hazardous Materials Impacts

Thresholds of Significance

For the purposes of this project hazardous materials impacts are considered significant if the project will:

- expose the public to a significant risk associated with the storage, use and disposal of hazardous materials from existing hazardous materials uses or contamination; or
- create a significant health hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment; or
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within 0.25 miles of an existing or proposed school; or
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Potential Sources of On-site Impacts

Chemical contaminants of concern on the project site include petroleum hydrocarbons, solvents, lead based paint, asbestos, fluorescent light tubes and ballasts that contain mercury and polychlorinated biphenyls (PCBs), chlorofluoro carbons, and metals. Soil and groundwater contamination, and hazardous building materials are present onsite. The presence of hazardous materials could result in the potential for exposure to construction workers during redevelopment, and possibly contaminated airborne dust migrating offsite, to affect adjacent land users. At this time, the project site is not suitable for residential uses, as described in the deed restrictions contained in Appendix F.

Contaminated Soils and Groundwater

While contaminated soils have been removed on the project site, there is a potential that additional contaminated soils would be disturbed during site redevelopment. The soils may contain a variety of chemical compounds associated with fuels, oils, solvents, metals, and other hazardous substances originating from historical and/or current land uses on the site. Contaminated soils encountered during site redevelopment activities, such as excavation and grading, could result in potential health risks to construction workers and/or the public.

Contaminated groundwater may be encountered during site redevelopment activities and could also result in potential health risks to construction workers and/or the public. If excavations were to extend to the groundwater table, dewatering could be required. Extracted contaminated groundwater would require onsite management and/or treatment.

- **Construction activities associated with redeveloping the site, such as demolition, excavation and grading could expose construction workers, and/or the public to health risks associated with contaminated groundwater and soil. (Significant Impact)**

Asbestos-Containing Materials and Lead-based Paint

Demolition of buildings that contain asbestos and lead-based paint could create dust at concentrations that would expose workers and nearby receptors to potential health risks. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing asbestos and lead-based paint. Appropriate modifications to renovation/demolition activities would be required if airborne lead levels exceed the current Federal OSHA action level of 30 micrograms per cubic meter (μg/m3) (calculated as an eight-hour, time-weighted average).

- **The proposed project would result in demolition of the existing buildings and facilities. Demolition activities could expose construction workers and/or the public to contaminants, including lead based paint and asbestos if those materials become airborne. (Significant Impact)**

Hazardous Materials Use, Transport, and Disposal during Construction

Site construction activities may involve the use and transport of hazardous materials. These materials could include contaminated soil and/or groundwater, building demolition debris containing lead and asbestos, chlorofluorocarbons, fluorescent light tubes and ballasts that contain mercury and polychlorinated biphenyls (PCBs), fuel, oils, and other chemicals used during development proposed for the property. Removal/relocation and transportation of hazardous materials at the site could result in an accidental release potentially posing health risks to workers, the public, and the environment.

- **Redevelopment of the site could expose construction workers and/or the public to hazardous materials during and/or following demolition/construction activities associated with the removal and/or transport of hazardous materials. (Significant Impact)**

Long-Term Impacts

Contaminated soils have been removed from the project site; however, there is still a potential for future users of the site to be exposed to hazardous materials. For this reason, the property owners have encumbered the site with deed restrictions which limit the types of future uses for the Plant 7 and the Test Track areas. It is anticipated that deed restrictions will also be in place for the Central Plant area of the site once clean-up is complete. The deed restrictions will ensure that the soil is covered with buildings and/or pavement, that groundwater is not drawn from the site for use, and that the property remains in non-residential uses to ensure that sensitive populations are not exposed to existing contaminants.

- **Deed restrictions will be in place for the project site prior to site redevelopment. These deed restrictions will reduce the potential for significant long-term adverse impacts to sensitive populations on the site to a less than significant level. (Less than Significant Impact)**

Impacts Due to Potential Future Use and Storage of Hazardous Materials on the Site

Hazardous materials could be used on the site as part of the research and development and commercial (dry cleaners, printers, etc.) uses proposed for the project site. However, the City's current hazardous materials ordinances and programs provide controls that reduce the potential for accidental releases on the site. Current regulatory requirements, which include record-keeping, monitoring, and containment systems, make it unlikely that a liquid spill would go undetected for very long.

The redevelopment of the site with office/R&D/commercial uses would not increase the likelihood of an adverse impact occurring as a result of a leak or spill of hazardous materials. Vehicle maintenance is a possible use of the site which may require the installation of underground gasoline storage tanks for the refueling of vehicles. These storage tanks would be installed and operated in conformance with all applicable local, state, and federal laws and regulations. Overall, the proposed project may result in a slight reduction in the likelihood of an adverse impact because the use of hazardous materials on the site may be less than under the existing heavy industrial zoning.

◆ **The proposed project would not result in an overall increase in the likelihood of incidents associated with the use and storage of hazardous materials. (Less Than Significant Impact)**

3. Mitigation and Avoidance Measures for Hazardous Materials Impacts

The project proposes to implement the following mitigation measures in order to avoid or reduce hazardous materials impacts to a less than significant level:

- At the time specific development is proposed, an Integrated Environmental Safety and Health Plan (IESHP) will be prepared for the construction phase of the project. The IESHP would provide: 1) a means for monitoring of hazardous substances in soils and in buildings that are to be demolished; 2) to assess and prioritize the risks associated with each potential hazard; 3) develop measures to minimize risk to workers and the public by controlling airborne emissions; 4) provide for coordination with the DTSC, BAAQMD, and other agencies as needed; and 5) control emissions of ordinary particulate matter or airborne dirt that would not be classified as "hazardous".
- All demolition activities will be undertaken according to OSHA and EPA standards to protect workers, and offsite receptors, especially nearby residents, from exposure to asbestos and lead based paint. Specific measures will include air monitoring during demolition/construction activities of existing buildings.
- Building materials classified as hazardous materials will be transported and disposed of in conformance with Federal, State and local laws.
- Cleanup and remediation of the site will be required to meet all Federal, state and local regulations.
- The existing ground water monitoring wells onsite will be abandoned properly, upon completion of all sampling, according to Regional Water Quality Control Board (RWQCB) and the Santa Clara Valley Water District regulations.
- Industrial development on the project site will be evaluated for possible impacts associated with the use of hazardous materials on the site.

***Conclusion*: Implementation of all appropriate mitigation measures reflected in state and federal laws, City Ordinances, and the inclusion of additional mitigation measures as described above, will avoid or reduce all potential adverse impacts associated with hazardous materials to a less than significant level. (Less than Significant Impact with Mitigation Measures Included in the Project)**

I. CULTURAL RESOURCES

The project site is located in an archaeologically sensitive area. Therefore, an archaeological study was performed by *Basin Research and Associates, Consulting Archaeologists,* in May 1997, which is on file in the San Jose Department of Planning, Building, and Code Enforcement, Room 400 of City Hall. The study included an archival search and reconnaissance level surface survey. The purpose of the surface reconnaissance survey was to look for surface indicators of potential prehistoric or historic archaeological resources. A historic structure inventory was completed for the site by *Ward Hill, Architectural Historian* in March 2002. This inventory is included in Appendix I.

1. Existing Setting

Prehistoric Period

Areas near the Guadalupe River in the Santa Clara Valley were occupied for hundreds of years by Native Americans. The project area is located approximately one mile southwest of the Guadalupe River; therefore, it is likely that the site provided a favorable environment for aboriginal populations. Occupation in the area dates from the Early Horizon (3000-500 BC) to Late Horizon (AD 1800) with many of the sites having multiple occupations through time. Numerous prehistoric recorded sites within several miles of the project site are associated with small and large villages, some of which have yielded Native American burials.

Little is known about these early villages because the Native American population quickly declined by 1810 due to introduced diseases, a declining birthrate, and the impact of the mission system as European settlers moved into the region.

Historic Resources

During the Mexican Period the project was situated within *Rancho El Portero de Santa Clara* (St. Clares colt or horse pasture). No structures of the Hispanic Period are known to have been constructed on the project site. It is likely that the land was used for stock grazing.

In the mid-1800s the majority of the rancho and pueblo lands and some of the ungranted land in California were subdivided as the result of population growth, the American takeover, and the confirmation of property titles. Growth of the population was attributable to the Gold Rush and the completion of the transcontinental railroad.

Commodore Robert Stockton purchased the property in 1847 from James Alexander Forbes. Stockton is credited with four major contributions to the area, including "The Alameda Gardens" subdivision, the importation of nursery stock from the East Coast, the first successful introduction of the honeybee to California (State Landmark 945, on the adjacent Norman Y. Mineta San Jose International Airport property), and the introduction of pre-fabricated houses into the area.

By 1866, Charles and Kate McLaughlin owned the property. McLaughlin was notable as the "stagecoach king" and for his later involvement with railroads. He controlled nearly all the Coast Line stages of the Overland Mail Company originating from San Francisco. McLaughlin was the contractor for the San Francisco and San Jose Railroad Company, and later was involved with the Western Pacific. As part of the Western Pacific franchise transfer

to the Central Pacific, McLaughlin was reassigned the Central Pacific land grants. These so-called "railroad lands" made him the most prominent land owner in the county.

No American Period buildings or features were present in the project area in 1866. By 1876, the FMC property was part of a 687- acre parcel owned by Kate McLaughlin. One residential structure was located within the present FMC site. According to a review of the USGS topographic map series it appears that this structure was removed by 1899 and the project area remained undeveloped through 1943. The property was sold to the City of San Jose between 1941 and 1943 for the future San Jose Airport. Around 1948, 167 acres were purchased by FMC.

Ward Hill, Architectural Historian, provided additional information regarding the structures currently located on the project site. Just eight of the buildings on the site pre-date 1956: the food packing machinery building (Building 15); John Bean Division office (Building 62); the foundry/machine repairs shop (Building 16); offices and engineering building (Wings M, 1 and 2); the research lab (Building 85); the armored vehicle factory (Building 2/3); the heat treating facility (Building 92); and a garage (Building 4). These buildings can be seen on Figure 9 in the Land Use Section of this EIR.

The buildings described above were evaluated in accordance with Section 15064.5(a) (2-3) of the CEQA guidelines. While the food packing machinery building and the John Bean Western Division office (Buildings 62 and 15) retain a high level of historic integrity, they do not appear to be eligible for the National Register under Criteria A, B, or C, nor do they appear to be historical resources for the purposes of CEQA. None of the other structures on the site were found to be historical resources for the purposes of CEQA.

2. Cultural Resources Impacts

Thresholds of Significance

For the purposes of this project, a cultural resources impact is considered significant if the project will:

- cause a substantial adverse change in the significance of a historic resource as defined in §15064.5 of the CEQA Guidelines; or
- cause damage to an important archaeological resource as defined in §15064.5 of the CEQA Guidelines; or
- eliminate important examples of major periods of California history or prehistory; or
- disturb any human remains, including those interred outside of formal cemeteries.

Archaeological Impacts

No prehistoric, historic, or architectural resources have been identified within or immediately adjacent to the FMC parcel. No surface or subsurface evidence of significant prehistoric and historic archaeological resources or architectural features was observed during the field inventory. Historic cultural materials associated with the former location of the ca. 1876 McLaughlin structure were not observed during the archaeological field review conducted for the project, however, there is a potential to encounter subsurface materials during construction.

◆ **Although no indicators of archaeological resources are present on the project site, the general area is considered to be moderately to highly sensitive for buried cultural resources. (Significant Impact)**

Historic Impacts

Based on the survey conducted of the site by *Basin Research Associates* and *Ward Hill*, it appears that no historic era resources are present onsite. Most of the buildings were built between 1951 and 1961 and none of the structures qualify for historic status on the City's Historic Resources Inventory.

◆ **The project would not result in the loss of historic structures. (No Impact)**

3. Mitigation and Avoidance Measures for Cultural Resources Impacts

The project proposes to implement the following mitigation measures in order to avoid or reduce cultural resource impacts to a less than significant level.

- Implementation of an archaeological monitoring program during construction by a professional archaeologist will be undertaken for the project site, as identified in the cultural resources assessment prepared by Basin Research.
- If any significant cultural materials are exposed or discovered during site preparation or subsurface construction activities, operations shall stop within 10 feet of the find the qualified professional archaeologist will evaluate the find and make recommendations as to the proper course of action. Potential recommendations could include evaluation, collection, recordation, analysis, etc. of any significant cultural resources followed by a professional report.
- If human remains are discovered, the Santa Clara County Coroner shall be notified. The Coroner will determine whether or not the remains are Native American. If the coroner determines that the remains are not subject to his/her authority, he/she will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American.

***Conclusion*: Implementation of the above listed mitigation measures will avoid or reduce potential cultural resource impacts from the proposed project to a less than significant level. (Less than Significant with Mitigation Measures Included in the Project)**

J. UTILITIES AND SERVICE SYSTEMS

1. Existing Setting

The project is located within the City of San Jose Urban Service Area.

Electricity, Natural Gas, and Telephone Service

Electricity and natural gas will be provided to the project site by the Pacific Gas and Electric Company (PG&E). It is anticipated that adequate electricity and natural gas services are available to serve the site. The proposed development would provide for unrestricted utility access and easement encroachments that might impair the safe and reliable maintenance and operation of PG&E's facilities would be avoided.

Communication services are provided to the project area by SBC (previously Pacific Bell Corporation).

Water Service

The project site is located within the water service area of both the City of Santa Clara and the San Jose Water Company. These water providers will provide both potable water and recycled water to the site when available. There are existing water mains on two sides of the project site. Coleman Avenue contains a 12-inch line and Newhall Avenue contains a 6-inch line. Santa Clara Valley Water District (SCVWD) records show wells located on a portion of the project site. These wells will be registered with the SCVWD and either maintained or abandoned in accordance with SCVWD standards.

Storm Drainage

The existing storm drain collection system consists of a 27-inch line located in Newhall Avenue that runs parallel to the site, and a 15-inch line located in Coleman Avenue that extends perpendicularly to the north. Additional lines exist on the northwest corner of the site and are located in Coleman Avenue. These lines consist of a 15-inch line, an 18-inch line and a 21-inch line. It is anticipated that the existing storm drain lines are adequate to serve the project; however, improvements may be required prior to project construction.[11]

Sanitary Sewer Service/Wastewater Treatment

The San Jose/Santa Clara Water Pollution Control Plant (Plant) provides wastewater treatment for the project area. The Plant is a regional facility located in North San Jose, and provides tertiary treatment of wastewater from several surrounding cities and sanitation districts. The cities of San Jose and Santa Clara jointly own the facility, but the City of San Jose operates and maintains the Plant.

During the average dry weather period (May 1 to October 31), the Plant has a treatment capacity of up to 167 Million Gallons influent flow per day (MGD). The average dry weather influent flow (or peak week flow) is determined as the highest average flow during any five-weekday periods between the months of June through October. For 2001, peak week flow was 123.9 MGD and occurred between June 4th and June 8th. The Plant's

[11] Gene Golobic, Kier & Wright, and Harry Freitas, City of San Jose Department of Public Works.

treatment capacity of 167 MGD is allocated between the several agencies served and the two co-owners through Master Agreements. The capacity available to the City of San Jose is approximately 106.39 MGD.

In 1989, the San Francisco Bay Regional Water Quality Control Board (Regional Board) ordered the Plant to reduce its discharge of metals (copper and nickel) by more than 50% to protect aquatic organisms in South San Francisco Bay, and meet state and federal water quality objectives. In addition, the Regional Board imposed a 120 MGD flow trigger (dry weather period of May through October) and required the Plant to reduce the quantity of effluent discharged to avoid converting the habitat of two endangered species; the salt marsh harvest mouse and the California clapper rail, from salt marsh to brackish or freshwater.

To address these concerns, the Regional Board incorporated the following programs as a condition of the Plant's 1998 National Pollutant Discharge Elimination System (NPDES) Permit:

1. Continue implementing the San Jose Action Plan (as revised December 22, 1992, and May 28, 1997) that incorporated the following activities designed to reduce the effluent flow to less than 120 MGD: water conservation, reclamation, wetlands mitigation, industrial water recycling, and increased public education.

2. Develop and implement a Contingency Plan to provide ample assurance that the effluent flows of the Plant are brought to and remain below 120 MGD. The Contingency Plan adds new measures, in a tiered format, aimed at controlling discharges of concern.

For the last five years, the Plant has been in compliance with the requirements of the Regional Board. The average dry weather effluent flow for 2002 will not exceed 104 MGD. Long-term plans to remain in compliance include water conservation and recycling.

Recycled Water for Landscape Uses

Recently constructed pipelines convey recycled water from the WPCP to the downtown San Jose area and northern Santa Clara for landscape irrigation use. The recycled, non-potable water is diverted from the WPCP in order to reduce freshwater discharge into the Bay, and to reduce the amount of potable water used for landscaping within the Santa Clara Valley. Recycled water use is also encouraged for other non-potable uses including cooling systems, water features, industrial processes, and construction.

Solid Waste Service

Industrial and commercial (including hotels) solid waste collection in San Jose is provided by a number of non-exclusive service providers and the waste may be disposed at any of the four privately owned landfills in San Jose. The existing disposal facilities in San Jose include the Newby Island Sanitary Landfill, Guadalupe Mines Rubbish Disposal Site, Kirby Canyon Sanitary Landfill, and Zanker Road Disposal and Recycling Center. According to the Source Reduction and Recycling Element prepared for the City of San Jose and the County-wide Integrated Waste Management Plan, there is sufficient landfill capacity for Santa Clara County needs for at least 30 more years. Recycling services are available to most businesses from private recyclers. The City of San Jose Environmental Services

Department also offers information and assistance to businesses wishing to recycle, or to expand their recycling activities.

2. Impacts to Utilities and Service Systems

Thresholds of Significance

For purposes of this project, a utilities and service system impact is considered significant if the project will:

- directly affect a major utility line or facility; or
- exceed wastewater treatment requirements of the Regional Water Quality Control Board; or
- result in a substantial increase in the demand for public services; or
- use fuel, water, or energy in a wasteful manner.

Sanitary Sewer/Wastewater Treatment

At buildout, the proposed development would result in an estimated wastewater flow of approximately 420,000 gallons per day.[12] This would be an increase of approximately 252,000 gallons per day over existing uses on the site.

As previously described, there are three existing sewer mains in the vicinity of Coleman Avenue. It is anticipated that these mains will be extended within Coleman Avenue to the new streets on the project site to serve the proposed development. The extent to which sanitary sewer facilities will be extended onto the project site will be determined at the PD Permit stage.

Water recycling and conservation are key strategies in maintaining compliance with the WPCP Plant's discharge limitations. During the PD Permit process, careful consideration will be given to the use of water conservation measures and the appropriate use of recycled water.

◆ **Implementation of the project would not result in a significant impact on the City's sanitary sewer or waste water treatment facilities. (Less Than Significant Impact)**

Water Supply

It is estimated that development on the site could use an additional 400,000 gallons of water per day, when compared to the existing development on the project site.[13] According to the San Jose Water Company, adequate water is available to serve the site.[14] During the PD Permit process, careful consideration will be given to the use of water conservation measures and the appropriate use of recycled water.

[12] Based on a coefficient of .140 per day per square foot for electronics/R&D uses.

[13] Generation Factors for Combined Industrial/Commercial uses from the City of San Jose Public Works Department.

[14] Fernando D. Mutia Jr., San Jose Water Company, personal communication.

- **Adequate water is available to serve the site; therefore, the project would not cause a significant increase in demand for water services compared with the existing condition. (Less Than Significant Impact)**

Solid Waste

According to the National Solid Waste Management Association, office uses generate approximately one pound of solid waste per 100 square feet per day while hotels generate approximately 0.5 pounds per square foot per day. Based on the higher of these two rates, if only office uses were developed on the site, the project would generate approximately 30,000 pounds of waste per day. Proposed uses of the site could include office, retail, research and development, airport parking, and hotel uses that may generate less waste than the existing heavy industrial uses on the site. Further, this amount of solid waste generation does not take into account any recycling of paper, cardboard, or plastics.

- **There is sufficient capacity in the existing solid waste disposal facilities in San Jose to accommodate the waste generated by the project. (Less Than Significant Impact)**

3. Utility and Service Systems Mitigation and Avoidance Measures

No mitigation measures are required or proposed.

K. ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4(a)(1)(C) and Guidelines Appendix F (Energy Conservation), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, and identify appropriate mitigation for reducing energy impacts.

Energy Implications

Development of the project would result in the consumption of energy in three forms: 1) the fuel energy consumed by construction vehicles; 2) bound energy in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and metal; and 3) ongoing operational use of energy by future occupants of the site for transportation and utilities. While the site is currently developed and was used for the manufacturing purposes, future uses on the site may use more energy than past uses on the site.

Construction of the project would result in the consumption of energy, especially in the use of fossil fuels for construction equipment. Development on the site will be designed and built in conformance with the provisions of Title 24 of the California Administrative Code, which sets energy efficient design standards, and regulate energy consumed for heating, cooling and with the City of San Jose Building Code. It will also be in conformance with the City of San Jose Building Code, which also sets forth energy efficient design standards. The proposed project would also potentially result in reduced vehicle trip lengths by providing jobs within the City of San Jose and in proximity to a future BART station.

In addition to the measures described above, Appendix F of the CEQA Guidelines identifies possible mitigation measures to reduce potential energy impacts of projects. These mitigation measures include the following:

1. Potential measures to reduce wasteful, inefficient, and unnecessary consumption of energy during construction, operation, maintenance, and/or demolition of existing structures.
2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy.
3. The potential for reducing peak energy demand.
4. Alternate fuels (particularly renewable ones) or energy systems.
5. Energy conservation which could result from recycling efforts.

Conclusion: The proposed project will be designed and constructed according to all state and local building codes and regulations aimed at reducing energy consumption. **(Less than Significant Impact)**

L. AVAILABILITY OF PUBLIC SERVICES

Unlike utility services, public facility services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resource base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Usually, new development will create an incremental increase in the demand for these services; the amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.) That is a fiscal impact, however, not an environmental one.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

1. Fire Service

Fire protection to the project site is provided by the San Jose Fire Department. For an Initial First Alarm Assignment, the SJFD would send two fire engines, one truck/USAR (Urban Search and Rescue Team) and one Battalion Chief. Station #7, located at 800 Emory Street, would send the first fire engine and Station #1, located at 201 North Market Street, would send an additional fire engine, truck/USAR, and Battalion Chief (See Table 13).

Should additional units be necessary, the Fire Department would send a third fire engine, a second truck/USAR and an additional Battalion Chief. The third engine and the second truck/USAR would come from Station #5, located at 1380 North Tenth Street. Station #29, located at 199 Innovation Drive, would send the second Battalion Chief.

The response times for First Battalion Chief, Third Engine and Second Truck Due would meet the San Jose Fire Department's response time goals. The response times for the First Engine, Second Engine, First Truck, and Second Battalion Chief Due are moderately in excess of City of San Jose standards. No additional personnel or equipment is expected to be necessary to serve the project site.

TABLE 13

FIRE STATION LOCATIONS AND RESPONSE TIMES

Station	Vehicle	Address	Goal Time	Response Time
# 7	Engine	800 Emory Street	4.0 minutes	4.6 minutes
# 1	Engine	201 North Market Street	6.0 minutes	6.9 minutes
# 1	Truck/USAR	201 North Market Street	6.0 minutes	7.6 minutes
# 1	Battalion Chief	201 North Market Street	9.0 minutes	6.9 minutes
# 5	Engine	1380 North Tenth Street	9.0 minutes	8.4 minutes
# 5	Truck/USAR	1380 North Tenth Street	11.0 minutes	9.2 minutes
# 29	Battalion Chief	199 Innovation Drive	11.0 minutes	11.6 minutes

The City of San Jose participates in the Automatic Aid and Mutual Aid programs. San Jose, Santa Clara, Milpitas and the Santa Clara County Fire Department are all members of the Automatic Aid program. This program allows the station closest to the scene of the fire, when available, to respond to the scene first. Therefore, neighboring departments can work in conjunction to reduce reflex and response times. Since portions of the proposed project are actually located within two cities, this program could be used during a potential incident.

The Mutual Aid program is a countywide program. When a developing fire overburdens one department, other departments will send the necessary task force to alleviate the burden.

2. Police Service

Police protection services are provided to the site by the City of San Jose Police Department (SJPD). Officers patrolling the project area are dispatched from police headquarters located at 201 West Mission Street. The SJPD presently consists of 1,329 sworn officers.

The SJPD's service area consists of 64 beats. Each beat is assigned to one of 12 districts. The beats are identified with a number and the districts are identified with a letter. The project site is located within District S, Beat 1. Beat S-1 serves an area of 2.17 square miles and 7,295 residents. In 1996, Beat S-1 had a total of 1,417 crimes, consisting of 517 felonies and 900 misdemeanors. The most frequent felonies in the project area include grand theft, narcotics felonies and patrollable auto theft. The most frequent misdemeanors in the project area include simple assault, car clout and disturbing the peace. Beat S-1 had approximately 194 crimes per 1,000 population.

The development of R&D/office and commercial uses would not generate a substantial demand for police service above the existing zoning designation.

3. Schools

The City of San Jose is served by a total of 19 public school districts, serving elementary, middle, and high school students. Thirteen of these districts are elementary school districts, three are high school districts and three are unified school districts. The project site is located within the boundaries of the San Jose Unified School District.

Development under the proposed PD Zoning will not generate a direct demand for increased school capacity.

Conclusion: **Implementation of the proposed project will not significantly increase the demand for public services such that a significant environmental impact is created. (Less Than Significant Impact)**

IV. CUMULATIVE IMPACTS

The California Environmental Quality Act (CEQA) requires that a project be identified as having a significant impact if its possible effects are "...individually limited but cumulatively considerable".[15] The CEQA Guidelines define "cumulative impacts" as meaning "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The individual effects may be multiple impacts from the same project, or impacts from a number of different projects.[16]

The Guidelines give further direction on how cumulative effects are to be addressed in an EIR. Specifically, an EIR is to provide *either* a list of "past, present and reasonably foreseeable future projects" whose impacts may contribute to cumulatively significant effects, *or* a "summary of projections contained in an adopted General Plan".[17]

1. Cumulative Impacts

Cumulative Traffic Impacts

Substantial development and redevelopment is occurring within the City of San Jose and in the project area. The northern and downtown areas of San Jose have recently experienced redevelopment and the construction of new office buildings. Development is also occurring within the City of Santa Clara, north and west of the project area. As described in Section III. A., *Land Use*, numerous residential, commercial, and industrial uses are present in the greater project area, as is Norman Y. Mineta San Jose International Airport.

For the purposes of this analysis, potential developments were identified as pending development that would add traffic to the study area under cumulative conditions and their impacts on the study intersections and freeway segments were evaluated. These pending projects are described in the table, below.

[15]Public Resources Code §21083(b).

[16]California Code of Regulations §15355.

[17]California Code of Regulations §15130(b)1(A) and (B).

TABLE 14 CUMULATIVE (PENDING) PROJECTS		
Project Name	**Land Use**	**Size**
College Park	R&D/Office Retail	1,360,000 sf 540,000 sf
Above Net	Retail	16,600 sf
Boston Properties	Retail	37,070 sf
Adobe 4th Tower	Office	261,300 sf
Marriott Courtyard	Hotel	200 rooms
Legacy	Office Retail Residential	1,100,000 sf 16,000 sf 650 units
Mitchell/DeAnza	Office	300,000 sf
South Market Office	Office	350,000 sf
Bocardo+A5/Gensler	Office	300,000 sf
Federal Courthouse	Office	650,000 sf
Divco West	Office	436,000 sf
Adobe Phase III	Office	297,900 sf
Downtown Mixed Use/Century Center	Retail Residential Office Hotel	437,000 sf 1,625 units 1,233,000 sf 400 rooms
San Jose State University	Residential Increased students/staff	4,020 beds 3,760 persons
San Jose Water Company	Office and Retail Residential	1,009,100 sf 325 units

The I-880/Coleman interchange improvement project was approved by VTA in May 2002 and the City of San Jose in March 2003. The project will reconstruct the entire interchange, including a new Coleman Avenue bridge over I-880 and new freeway ramps that meet current design standards. The project also includes a new direct connector ramp from Airport Boulevard to southbound I-880. Construction on the interchange project is scheduled to begin in 2003 with completion expected in 2005.

Likely future development in the area also includes the ongoing expansion of NYMSJIA in accordance with the adopted NYMSJIA Master Plan, as described in Section II. In addition, plans for a proposed extension of the Bay Area Rapid Transit (BART) system to San Jose/Santa Clara include a station and maintenance facility in the project vicinity. Finally, an automated people mover is proposed near the northwestern boundary of the site to allow future access from the existing Santa Clara Caltrain Station/future BART station to NYMSJIA. Two options for connecting the airport to the transit stations with the people mover are currently being evaluated, but are not a part of this project.

Cumulative development has resulted in a significant increase in traffic in the project area, and future increases are expected to occur. For this analysis, cumulative trips from the development shown in Table 14 were added to Project Condition volumes to obtain cumulative traffic volumes. Using the City of San Jose methodology, all intersections will continue to operate at acceptable levels of service, with the exception of the following intersections:

- Coleman Avenue/Taylor Street — LOS D to F during AM and PM peak hours
- Coleman Avenue/Hedding Street — LOS E to F during the AM peak hour; LOS D to E during the PM peak hour
- Aviation Way/Coleman Avenue — LOS D to F during the AM peak hour

According to the City of Santa Clara LOS standards, the project traffic would not cause a significant impact on City of Santa Clara study intersections under the cumulative conditions.

All CMP intersections are expected to operate at acceptable levels of service based on CMP criteria, with the exception of the following intersections:

- I-880/Coleman Avenue — LOS D to E during the AM peak hour
- Central Expressway/Scott Blvd. — LOS E to F during the PM peak hour
- Central Expressway/De La Cruz — LOS E to F during the AM peak hour

Cumulative Noise Impacts

Cumulative development has resulted in a substantial increase in ambient noise levels in the project area. Ground, air, and rail traffic are the largest sources of noise in the vicinity of the project. Noise typically associated with urban environments is present, which also contributes to the cumulative ambient noise levels. The project would change the zoning on the site to allow uses such as R&D/office, retail, hotel, car rental, and airport parking, which would be expected to generate less noise overall when compared to the existing *Heavy Industrial* land uses currently located on the site. In addition, new building specifications would reduce the noise generated on the site as compared to the existing land uses, which were not constructed in accordance with current noise attenuation requirements.

Cumulative Impacts to Biological Resources

Cumulative development has resulted in a significant loss of Burrowing Owl habitat within Santa Clara County. As described in Section III. G., *Vegetation and Wildlife*, the proposed project would result in the significant loss of Burrowing Owl habitat on the project site. The significance of this loss is lessened somewhat by the proximity of NYMSJIA, where Burrowing Owl habitat is located, since these lands are anticipated to remain habitat in perpetuity; however, the cumulative loss of owl habitat would remain significant.

Cumulative Impacts to Public Services

The project, in conjunction with other future development anticipated to occur, would not have cumulatively significant impacts upon public services, including fire, emergency, and police within the project area. While the project may incrementally increase calls for service due to increase in development density on the site, this would not be cumulatively significant.

Cumulative Impacts to Air Quality

Cumulative development has resulted in a significant degradation in ambient air quality in the greater project area. While emission control technology has improved overall air quality in recent years, the project would contribute to this degradation, thereby resulting in a significant unavoidable cumulative air quality impact. It should be noted, however, that the site's location adjacent to a

Caltrain Station and the future location of a BART Station would be beneficial from a transportation/land use planning perspective and would support the proposed intensification of development on the site. Connections to these facilities may be constructed in the future; however, they are not proposed as part of this project.

- **Implementation of the project along with buildout of other foreseeable future development would result in a significant cumulative impact on traffic, regional air quality, and Burrowing Owl habitat. (Significant Unavoidable Cumulative Impact)**

2. Mitigation for Cumulative Impacts

Significant cumulative impacts identified in the previous discussion include traffic, regional air quality, and Burrowing Owl habitat. Mitigation for cumulative impacts is discussed below.

Mitigation for Cumulative Traffic Impacts

The CEQA Guidelines discuss the fact that mitigation for cumulative impacts may be different than for individual project-specific impacts. The Guidelines state that:

"…the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than imposition of conditions on a project-by-project basis." [Section 15030]

This responds to the problem that arises when the scope or scale of cumulative impacts is beyond the ability of a single development or even a single jurisdiction to mitigate. Traffic congestion in Santa Clara County is a regional problem. Much of congestion identified in the project's traffic analysis is on regional transportation facilities, including freeways, and much of the existing congestion in the area is a result of through movements. The Santa Clara County Congestion Management Plan identifies the preparation of deficiency plans as an appropriate response to significant impacts on regional facilities. The Congestion Management Agency is preparing a County-wide Deficiency Plan to address long-term regional traffic congestion and the improvements to the regional transportation systems that may help reduce it. The County-wide Deficiency Plan has not yet been completed, and the mechanisms for funding its implementation have not been adopted, but participation in such a plan may be the only effective mitigation for substantially reducing or mitigating cumulatively significant traffic impacts. Because no plan exists, it is unclear whether regional traffic impacts could be reduced to a less than significant level.

This implies that a programmatic approach to cumulative mitigation may be necessary. Contributions toward a special fund for improvements to the CMP roadway network would be a programmatic mitigation. The level of participation by the new development proposed for the project area could be assessed, based on a reasonable relationship to the individual development's contribution to the cumulative traffic impact.

The implementation of improvements to the regional roadway system may reduce impacts to the local streets, as through traffic is redirected to the regional system. Mitigation for impacts to local intersections would require project-specific analysis and design solutions, based on the timing of individual proposals and the status of planned development. Therefore, specific mitigation measures for cumulative impacts to local intersections as a result of the project have not been identified.

Conclusion: **Since there is no mechanism in place to achieve mitigation of identified cumulative traffic impacts, this would be a significant unavoidable cumulative impact. (Significant Unavoidable Cumulative Impact)**

Mitigation for Cumulative Impacts to Burrowing Owl Habitat

As discussed in Section III., G. of this EIR, mitigation for the loss of Burrowing Owl habitat would need to be whatever actions could result in the same or an equivalent amount of habitat being available to the existing population of birds after the project is built. Unless such created habitat has been used by Burrowing Owls in the past, or is immediately adjacent to occupied habitat, there is little assurance that the mitigation habitat will actually be occupied by the impacted population. Therefore, the project would result in a significant unavoidable cumulative impact associated with the loss of Burrowing Owl habitat.

Conclusion: **The proposed project would result in a significant unavoidable cumulative impact as a result of the loss of Burrowing Owl habitat. (Significant Unavoidable Cumulative Impact)**

Mitigation for Cumulative Air Quality Impacts

Air quality impacts are primarily a result of traffic impacts in the project area. While the project's contribution to current regional air pollution is considered to be significant, the BAAQMD assumes that air quality standards will be achieved in the region by the year 2010. The BAAQMD's guidelines would, therefore, consider project contributions to be cumulatively significant in the near term, but not significant in the long term.

Mitigation for significant air quality impacts includes techniques for reducing automobile traffic. Site design and operational programs that encourage carpooling, use of transit, and other transportation other than single occupant vehicles are encouraged by the CMP, BAAQMD, and other regional planning agencies. As noted above in the discussion of cumulative traffic, given the proximity of the cumulative projects to planned major transit improvements to LRT, BART, and Caltrain, it is likely that there will be some increase in transit ridership, with a corresponding reduction in vehicle trips. These techniques will reduce air quality impacts, but the Regional Clean Air Plan anticipates that only regional and regulatory programs to achieve cleaner burning vehicles and fuels and reducing automobile usage on a regional scale will result in long-term achievement of air quality standards. The proposed project is consistent with the general policy direction of the Clean Air Plan, in that it proposes a high density employment center at an infill location adjacent to major freeways and transit. The extent to which this infill development reduces commutes both in and out of the County will ultimately determine whether it will contribute to an improvement in regional air quality. Near term cumulative air quality impacts, however, will remain a significant unavoidable impact.

Conclusion: **Construction of all of the proposed developments considered in the cumulative analysis would contribute to near term air quality standard exceedances. This would be a significant unavoidable cumulative impact. (Significant Unavoidable Cumulative Impact)**

V. ALTERNATIVES

CEQA requires that all EIRs, in addition to an analysis of the proposed project, analyze a range of alternatives. The CEQA Guidelines specify that the EIR identify alternatives which "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project". The purpose of this section is to ascertain whether there are alternatives of design or scope which substantially lessen the significant impacts, even if as the Guidelines state, those alternatives "impede to some degree the attainment of the project objectives", or are more expensive.

Due to hazardous materials contamination, approximately 67.5 acres of the project site are currently encumbered by deed restrictions that only allow the construction of industrial, commercial, research and development, and office uses on the site. Once the remediation is complete for the remaining 25 acres of the site, it too may be encumbered by a deed restriction. Therefore, an alternative that includes residential uses on the site was not considered to be a viable alternative under CEQA.

A. NO PROJECT ALTERNATIVE

The CEQA Guidelines stipulate that an EIR specifically include a "no project" alternative, which should address both "the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services." The No Project Alternative could consist of retaining the existing *HI Heavy Industrial* zoning designation, and allowing a new heavy industrial use to redevelop the site, and a no development or "existing conditions" scenario (i.e., reusing the existing buildings for industrial purposes, without new construction).

1. No Development Scenario

Under this scenario, the property would physically remain as it is. It is assumed another industrial/manufacturing user would take over a portion or the entire site and reuse the buildings and facilities. No new construction or expansion of facilities would occur under this alternative.

Potential for Significant Impacts

Potential impacts to traffic, vegetation and wildlife, and cultural resources resulting from this alternative would be less than under the proposed project because no new construction would occur. It is assumed that the buildings and associated infrastructure would remain as is, except for minor tenant improvements.

Traffic Congestion

Because a majority of the site is currently vacant or underutilized, reuse of the site would result in some increase in traffic and associated air quality emissions over existing conditions. Full occupancy of the site, however, would be incrementally less than the proposed project because the intensity of land use would be expected to be less.

Air Quality

Depending on the type of heavy industrial uses that would occupy the site, air quality impacts could be greater than the proposed project if heavy manufacturing occurred that emitted large quantities of stationary source pollutants or toxic air contaminants.

Vegetation and Wildlife

This alternative would have fewer impacts to vegetation and wildlife. No construction would likely mean that no removal of the ordinance size trees would occur. In addition, no construction would likely result in fewer potential impacts to Burrowing Owls and their habitat.

Hazardous Materials

Remodeling of existing buildings or other tenant improvements would result in similar asbestos and lead-based paint exposure similar to the project. Heavy industrial uses would also be expected to use and/or store hazardous materials on the project site with this alternative.

Conclusion

This alternative would be environmentally superior to the proposed project. This alternative would not result in the loss of trees, or loss of Burrowing Owl habitat. In addition, traffic impacts, and air quality impacts are expected to be less than with the proposed project.

The potential land use compatibility impacts including the use of hazardous materials could be greater, and depending on the use, noise levels generated on the site could be higher.

This alternative would not be compatible with any of the project objectives. "No Development" on the site would not enhance the economic vitality of the area.

This alternative is not considered to be economically feasible. Substantial upgrades to the buildings would be needed to meet current seismic and safety codes. According to the applicant, one of the main reasons for closure of this facility is that they find it is more economical and efficient to obtain space in newer buildings off-site than to bring this facility up to current building code standards. If a user who is willing to reuse the existing facility and upgrade the buildings is not found, it is likely the site would be left vacant and potentially subject to deterioration and vandalism.

2. Development under the Existing Zoning Designation

This alternative would leave the site with its current zoning designation of *HI Heavy Industrial.* This designation allows industrial uses with nuisance or hazardous characteristics, such as extractive and primary processing industries, heavy and light manufacturing, and warehousing, which are best segregated from other uses. Office, research and development and wholesaling activities are discouraged under this designation in order to reserve development sites for traditional heavy industrial activities. Auto dismantling or recycling facilities could be accommodated on the site with a conditional use permit. Such uses could potentially result in greater noise and hazardous materials impacts when compared to the proposed project. This use is not consistent with the General Plan

designation for the site of *Combined Industrial/Commercial*, which allows the uses of the Light Industrial, Industrial Park, Neighborhood/Community Commercial, and General Commercial General Plan designations.

It is assumed that if the present users were to vacate this property, another industrial user would redevelop the site, subject to relevant City of San Jose Development Permit and CEQA requirements.

Potential for Significant Impacts

Traffic

Redevelopment of the project site under the existing zoning would be expected to result in incrementally less traffic than under the proposed land use scenario, since heavy industrial land uses generate less traffic than commercial, hotel, and office uses.

Air Quality

A reduction in traffic would result in fewer air quality impacts. Although subject to the same uncertainties reflected in the discussion of traffic impacts, this alternative would probably result in a modest reduction of air quality impacts.

Vegetation and Wildlife

Redevelopment of the site would likely result in construction activities that would result in the loss of Burrowing Owl habitat and ordinance size trees similar to impacts of the proposed project.

Potential for Additional Impacts

Some modifications to the site would be necessary to accommodate a new user. Demolition of the existing buildings and facilities would likely be required which would result in similar asbestos and lead-based paint impacts as the project. New buildings would be constructed, and infrastructure would be improved to create adequate access and parking for most alternative uses. Significant intensification of use beyond the existing circumstances will require upgrading of utilities and other infrastructure. This alternative would have similar impacts regarding loss of trees. The "No Project" alternative discussion required by the CEQA Guidelines is assumed to occur within the constraints of existing infrastructure and community services. There may be some minimal level of reuse of the some of existing buildings that could occur without improving or expanding the infrastructure.

Conclusion

Redevelopment and reuse of the project site could occur under the existing zoning designation. It is assumed that it would create similar impacts as the proposed project as a result of new construction including impacts to air quality, and impacts to individual Burrowing Owls and to Burrowing Owl habitat. It is likely, however, that traffic impacts would be less. Hazardous materials impacts associated with existing contamination and the risk of exposure would remain the same. The potential use of hazardous materials could be greater, and depending on the use, noise levels generated on the site could be higher.

In summary, this alternative could have some reduced environmental impacts, when compared to the proposed project, because of a possible reduction in auto traffic. Heavy Industrial land within the City would be retained. This alternative, however, does not meet the project objectives of providing increased employment opportunities because it would not create the job density that could be achieved with redevelopment of the project site. This increase in job density is appropriate for the site due to its unique location in north San Jose, adjacent to Caltrain and the NYMSJIA. In addition, this alternative would not provide the Airport with off-site compatible uses, such as hotels, car rental, and/or airport parking opportunities.

B. REGIONAL COMMERCIAL ALTERNATIVE

Under this alternative, the entire site could be developed with a regional shopping center that would draw consumers on a regional scale. This could include a large shopping mall, a group of specialty stores, or an outlet mall.

Potential for Significant Impacts

Traffic

It is difficult to compare traffic impacts associated with the proposed project to those of a regional commercial use. While regional commercial uses would have a higher trip generation rate, these trips would not be expected to occur during AM and PM peak hours. Therefore, it is likely that less traffic congestion would result with a regional commercial use for the site during weekdays; however, traffic would be greater on Saturdays. It should be noted that a regional commercial use may have greater impacts to intersections and freeway segments in surrounding jurisdictions when compared to the proposed project since vehicle trips would originate regionally, rather than locally.

Air Quality

Less traffic would result in corresponding air quality impacts. Although subject to the same uncertainties reflected in the discussion of traffic impacts, this alternative would probably result in an overall decrease in air quality impacts over the proposed designation.

Vegetation and Wildlife

Redevelopment of the site for any purpose would likely result in impacts to Burrowing Owls and their habitat and ordinance size trees similar to those under the proposed project.

Potential for Additional Impacts

Modifications to the site would be necessary to accommodate retail/commercial uses. Demolition of the existing buildings and facilities would likely be required. New buildings would be constructed, and infrastructure would be improved to create adequate access and parking for most alternative uses.

Noise impacts would be similar to those expected under the proposed project. Shoppers would be subjected to significant single event noise levels outside of buildings due to the proximity of the airport.

Conclusion

It is assumed that a regional commercial use would create overall similar impacts when compared to the proposed project. Demolition and construction activities to accommodate new uses on the site would result in similar impacts as the proposed project. Redevelopment of the site with regional commercial uses could result in a similar loss of Burrowing Owl habitat and ordinance size trees. Hazardous materials impacts associated with existing contamination and the risk of exposure would remain the same.

In summary, this alternative would have similar environmental impacts except for traffic and air quality, when compared to the proposed project. Given the abundance of regional shopping opportunities in the City, and particularly in proximity to this site (Westfield/Valley Fair Shopping Mall, Santana Row, e.g.), this site does not seem to offer an economically feasible location to support additional regional retail uses. In addition, this alternative is not compatible with the City of San Jose's General Plan policies. The General Plan encourages new regional scale development to locate in the Downtown Core Area.

C. REDUCED SCALE ALTERNATIVE

The reduced scale alternative would consist of clearing the site of existing structures and redeveloping the property with R&D/commercial structures totaling approximately 1.8 million square feet. The reduced scale alternative would also include parking structures to reduce the amount of surface parking on the project site.

Potential for Significant Impacts

Traffic

Reduction in the size of the project would generate fewer trips and less associated congestion. However, although the traffic impacts would be reduced, they would not be eliminated fully. It is expected that significant unavoidable impacts to regional freeway segments would remain. This alternative would also allow for the development of the site to be clustered in such a way as to place the structures closer to the proposed BART Station.

Air Quality

Because this alternative would generate less traffic, associated emissions are expected to be reduced. Therefore, this alternative would have less air quality impacts than the proposed project. It is estimated that the Reduced Scale Alternative would still result in significant unavoidable regional air quality impacts with regard to emissions of hydrocarbons, given the BAAQMD thresholds of significance.

Vegetation and Wildlife

Under this alternative depending on how the site was developed, Burrowing Owl habitat could be preserved and impacts to Burrowing Owls could be avoided. A reduced size project with structured parking would allow for the preservation of seven acres of Burrowing Owl habitat on the 92.5 acre site. More ordinance size trees on-site could also be preserved. Therefore, this alternative would have fewer biological impacts when compared to the proposed project.

Conclusion

The No Project alternative is the environmentally superior alternative to the proposed project. This alternative is the environmentally superior alternative among the other alternatives to the project. This alternative would be superior to the project as proposed because less density will have corresponding reductions in impacts to air quality, biological resources, and traffic congestion. Significant unavoidable impacts due to the loss of Burrowing Owl habitat would be avoided. To the extent that this alternative provides some economic benefits, it meets some of the project objectives. The redevelopment and infrastructure costs, however, would be too great to make this alternative economically feasible. This alternative includes fewer jobs, and thereby, also falls short of having the same beneficial effects on San Jose's jobs/housing balance as the proposed project.

D. ALTERNATIVE LOCATION

Criteria that were used to identify an alternative site that might reasonably be considered to "feasibly" accomplish most of the basic objectives of the project, yet would potentially have less significant impacts of the project included:

- a site at least 92.5 acres in size;
- designated in the City's General Plan for industrial/commercial uses; and
- adequate traffic capacity to serve the project.

As land becomes more scarce in San Jose, there is no other 92.5-acre site located within the City that is designated for Combined Industrial/Commercial land uses. While the North Coyote Valley area of south San Jose was chosen as a possible alternative location, some of the uses proposed for the project, including commercial, hotel, and car rental uses, would not be allowed within this area.

The North Coyote Valley area is located roughly on the west side of U.S. Highway 101, northerly of the Coyote Valley Urban Reserve, and easterly of the Santa Teresa Hills. It has a *Campus Industrial* General Plan designation and has been zoned for campus industrial uses since the mid-1980s. Although it does not have a commercial component, it contains parcels large enough to accommodate a 92.5-acre development of R&D/office uses. Currently most of the 1,444 acres of lands designated for *Campus Industrial* uses are undeveloped.

Potential for Significant Impacts

Traffic

The North Coyote Valley area is not as congested as the project area and is located in proximity to a high concentration of residential uses. The commute pattern under this alternative would not exacerbate an existing prevailing countywide pattern of driving to the north in the morning and south in the evening. Industrial uses in North Coyote Valley Campus Industrial area would help support "reverse" commute patterns. Because traffic conditions are not deteriorated in this area of the City to the same degree they have degraded in North San Jose, it does not require either an Area Level of Service Policy or an Area Deficiency Plan. Therefore, it is expected that traffic impacts would be less under this alternative. Because the area is undeveloped it would require the installation of costly infrastructure improvements (i.e. construction of new roads and an interchange with U.S. 101 etc.).

Air Quality

To the extent that development of the proposed square footage at an alternative location generates approximately the same amount of traffic, the emissions will not be significantly reduced. However, to the extent that the project traffic will experience and/or cause less congestion, there would be incrementally less air pollution. This is especially true for local (carbon monoxide, CO) pollution at local intersections. The net result of three million square feet of office/R&D development and an undetermined amount of hotel, retail, and commercial uses will remain a significant impact on regional air quality.

Vegetation and Wildlife

This alternative would not be expected to impact Burrowing Owls or their habitat because there are no known populations of Burrowing Owls within North Coyote Valley. It may result in impacts to other special status species and the loss of a greater number of ordinance-size trees, depending upon the location chosen.

Other Impacts

This alternative would result in development of vacant land for urban uses which would result in a loss of open space, loss of agricultural land (most of the area is designated as either prime agricultural land, or Lands of Statewide Importance by the Soil Conservation Service), and potential impacts to sensitive habitat areas (wetlands). There is a greater potential for visual impacts because most of the North Coyote Valley area has not been developed and is located on the fringe of urban development. In addition, this area experiences greater flood impacts. Development within this area would need to contribute to a regional flood solution in the form of a flood control basin or provide individual storm detention ponds on-site.

Conclusion

Although this alternative would result in less traffic, air quality, and Burrowing Owl habitat impacts, this alternative is not environmentally superior to the project as proposed because it would result in other significant unavoidable impacts. This alternative would convert vacant land to urban uses resulting in the loss of open space, loss of agricultural land, potential impacts to sensitive habitat areas and trees, and visual impacts.

This alternative would not meet the objectives of the proposed project to revitalize an under-utilized site, at an infill location that is conveniently located near Downtown San Jose and the Norman Y. Mineta San Jose International Airport.

VI. SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED

The project would result in significant unavoidable regional traffic impacts to freeway segments and result in a significant contribution to regional air pollution. This project in conjunction with other foreseeable projects would result in significant unavoidable cumulative impacts to freeway segments, the loss of Burrowing Owl habitat, and regional air quality.

VII. GROWTH INDUCING IMPACTS

The site has been previously developed and currently contains an urban land use designation of *Combined Industrial/Commercial.* The proposed rezoning would cause some increase in employment potential. However, due to the City's jobs to housing imbalance, the increase is not considered to be significant. The project is within the urban boundaries of the City of San Jose. Redevelopment of the site will not require any significant extension of utilities to provide services. The project would facilitate the reuse of underutilized land that has been developed for many years with urban uses, in an existing urban setting, and would not set any significant new precedent which might allow or encourage other development to occur outside the existing urban envelope.

VIII. IRREVERSIBLE CHANGES TO THE ENVIRONMENT

Irreversible changes to the environment would result with the construction and demolition activities. Other irreversible changes associated with the project are the future use of nonrenewable resources during construction, including concrete, glass, plastic and petroleum products. Operations associated with the future uses would also consume natural gas and electric energy.

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